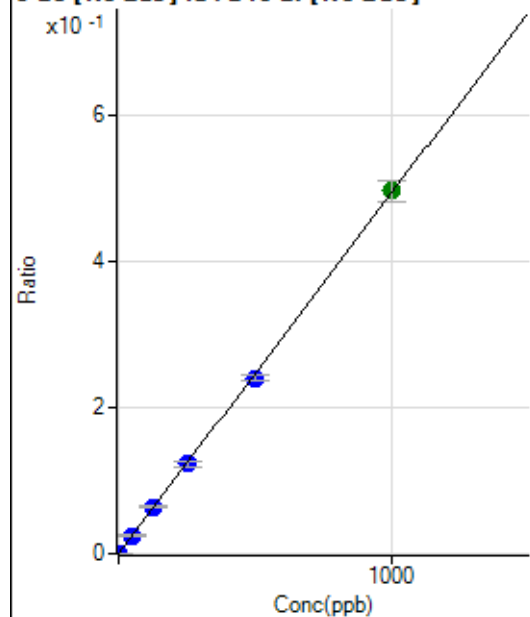


Calibration for 010CAL.S.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8030822-MS.b\
 Analysis File: P8030822-MS.batch.bin
 DA Date-Time: 2022-03-08 17:38:42
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2022-03-08 13:21:05
2	006CAL.S.d	S02	2022-03-08 13:33:24
3	008CAL.S.d	S03	2022-03-08 13:39:32
4	009CAL.S.d	S04	2022-03-08 13:42:35
5	010CAL.S.d	S05	2022-03-08 13:45:41
6	011CAL.S.d	S06	2022-03-08 13:48:44
7	012CAL.S.d	S07	2022-03-08 13:51:49
8	013CAL.S.d	S08	2022-03-08 13:54:53

9 Be [No Gas] ISTD:6 Li [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.33	0.0000	P	28.7
2	☐	1.000	1.104	1231.81	0.0006	P	1.7
3	☐	50.000	49.901	56641.55	0.0247	P	5.9
4	☐	125.000	128.736	142121.11	0.0636	P	3.1
5	☐	250.000	248.377	282230.40	0.1227	P	5.8
6	☐	500.000	487.820	567604.34	0.2410	P	3.5
7	☐	1000.000	1006.034	1197230.07	0.4971	A	5.9
8	☐			2838.82	0.0012	P	68.5

$$y = 4.9409\text{E-}004 * x + 1.1252\text{E-}005$$

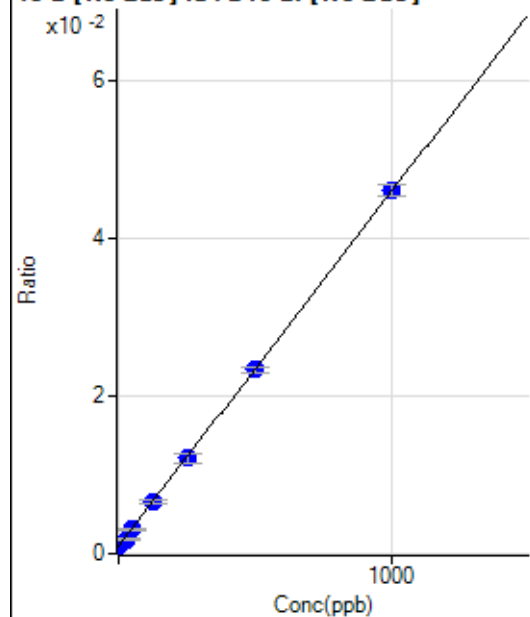
$$R = 0.9999$$

$$DL = 0.01959$$

$$BEC = 0.02277$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2186.41	0.0010	P	3.3
2	☐	25.000	18.891	4044.44	0.0018	P	8.4
3	☐	50.000	46.476	7056.33	0.0031	P	7.0
4	☐	125.000	123.401	14606.51	0.0065	P	8.0
5	☐	250.000	247.279	27854.47	0.0121	P	9.2
6	☐	500.000	498.651	55236.69	0.0234	P	3.1
7	☐	1000.000	1001.884	111141.85	0.0461	P	3.3
8	☐			20504.41	0.0085	P	7.0

$$y = 4.5035\text{E-}005 * x + 9.7799\text{E-}004$$

$$R = 1.0000$$

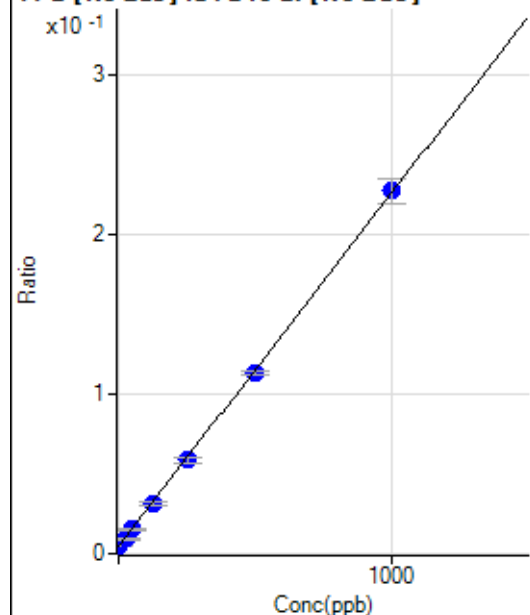
$$DL = 2.171$$

$$BEC = 21.72$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10306.28	0.0046	P	4.5
2	☐	25.000	20.746	20334.90	0.0092	P	7.0
3	☐	50.000	48.252	35115.97	0.0153	P	4.5
4	☐	125.000	122.519	70801.47	0.0317	P	8.1
5	☐	250.000	243.230	134310.90	0.0584	P	7.0
6	☐	500.000	491.813	267235.00	0.1133	P	2.7
7	☐	1000.000	1006.290	547385.52	0.2271	P	6.8
8	☐			97304.25	0.0405	P	7.3

$$y = 2.2106E-004 * x + 0.0046$$

$$R = 0.9999$$

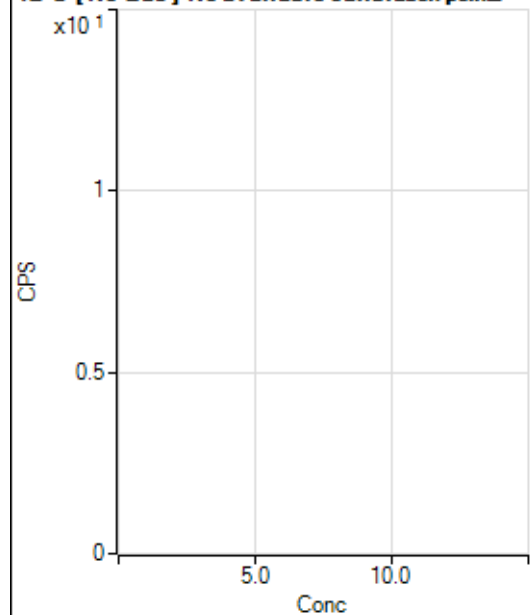
$$DL = 2.827$$

$$BEC = 20.86$$

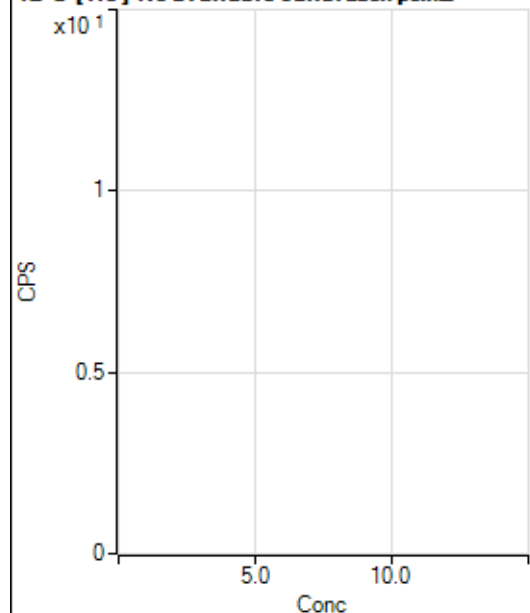
Weight: <None>

Min Conc: 0

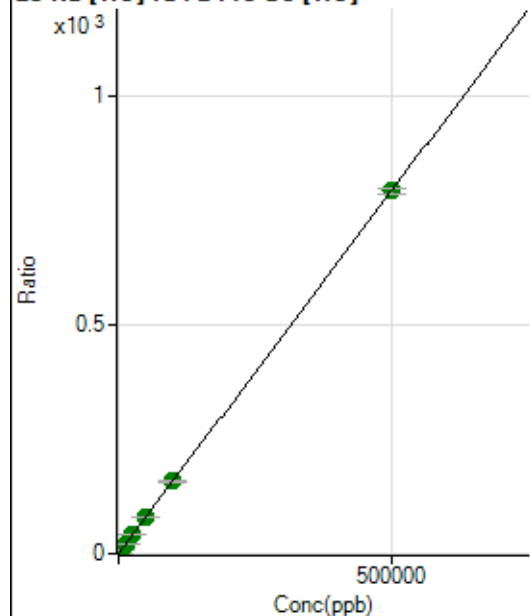
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			6496948.67		A	0.5
2	☐			7144008.93		A	1.6
3	☐			8874150.98		A	4.0
4	☐			7133545.38		A	0.4
5	☐			8895717.65		A	1.7
6	☐			7952095.23		A	1.7
7	☐			8424674.93		A	1.8
8	☐			8195611.21		A	4.4

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			70682.01		P	2.0
2	☐			74526.01		P	2.2
3	☐			96526.01		P	2.4
4	☐			76312.99		P	3.3
5	☐			95147.57		P	1.2
6	☐			83571.75		P	1.7
7	☐			91645.18		P	1.0
8	☐			92230.85		P	2.0

23 Na [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15380.65	0.1031	P	4.9
2	☐	500.000	475.862	130811.00	0.8584	P	2.3
3	☐	5000.000	5208.342	1299354.20	8.3697	A	1.6
4	☐	12500.000	12650.893	3115478.87	20.1823	A	1.0
5	☐	25000.000	25319.212	6037835.25	40.2891	A	0.6
6	☐	50000.000	50225.324	12225927.01	79.8195	A	0.8
7	☐	100000.00	99752.875	24438964.26	158.4283	A	1.2
8	☐	500000.00	500005.10	125878366.7	793.6982	A	1.7

$$y = 0.0016 * x + 0.1031$$

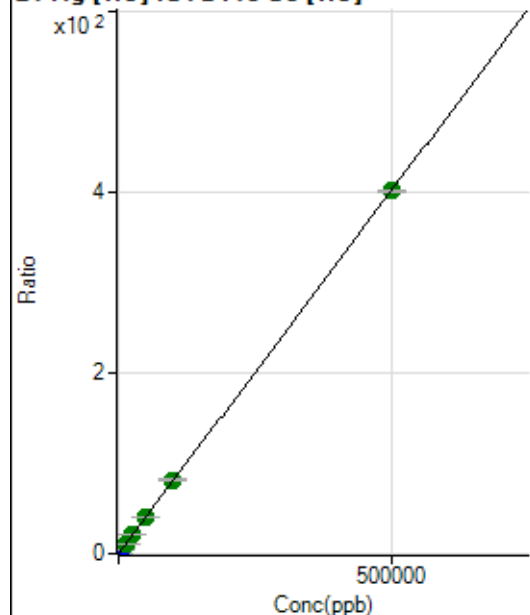
$$R = 1.0000$$

$$DL = 9.61$$

$$BEC = 64.99$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	344.46	0.0023	P	5.9
2	☐	500.000	504.093	62016.53	0.4070	P	2.2
3	☐	5000.000	5105.142	636569.58	4.1004	P	0.7
4	☐	12500.000	13144.974	1629021.73	10.5544	A	1.8
5	☐	25000.000	25839.665	3108947.21	20.7450	A	0.4
6	☐	50000.000	51060.963	6278559.21	40.9913	A	0.9
7	☐	100000.00	101619.87	12585358.70	81.5772	A	1.2
8	☐	500000.00	499510.76	63592244.48	400.9823	A	0.5

$$y = 8.0275\text{E-}004 * x + 0.0023$$

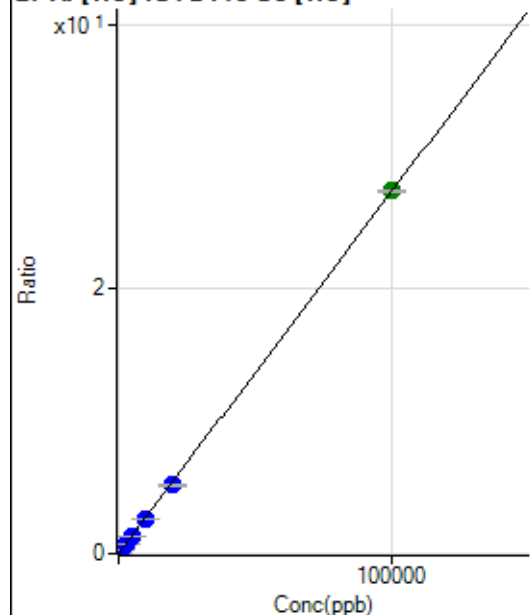
$$R = 1.0000$$

$$DL = 0.5052$$

$$BEC = 2.876$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.74	0.0006	P	14.4
2	☐	20.000	18.569	869.92	0.0057	P	4.8
3	☐	1000.000	978.342	41655.35	0.2683	P	0.8
4	☐	2500.000	2418.900	102262.51	0.6625	P	0.3
5	☐	5000.000	4896.319	200870.87	1.3404	P	1.6
6	☐	10000.000	9513.696	398805.45	2.6038	P	1.3
7	☐	20000.000	18895.655	797637.20	5.1709	P	1.5
8	☐	100000.00	100276.92	4351646.36	27.4389	A	0.4

$$y = 2.7362\text{E-}004 * x + 6.2929\text{E-}004$$

$$R = 0.9999$$

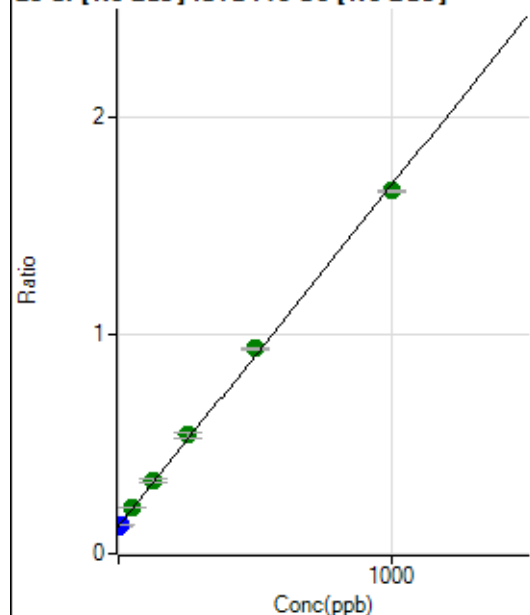
$$DL = 0.9928$$

$$BEC = 2.3$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	575772.19	0.1264	P	2.6
2	☐	10.000	2.197	619312.56	0.1298	P	1.3
3	☐	50.000	55.361	996288.03	0.2128	A	0.9
4	☐	125.000	134.085	1613229.41	0.3357	A	3.7
5	☐	250.000	267.550	2559653.20	0.5440	A	4.8
6	☐	500.000	522.127	4570295.76	0.9414	A	0.8
7	☐	1000.000	983.223	8099493.67	1.6612	A	0.8
8	☐			964790.36	0.1901	A	1.4

$$y = 0.0016 * x + 0.1264$$

$$R = 0.9993$$

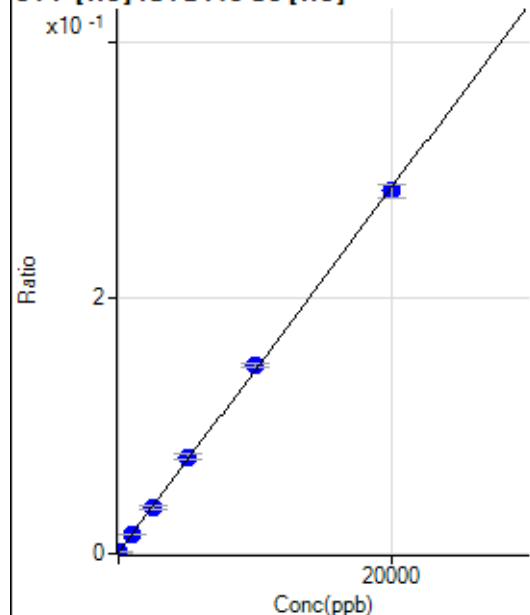
$$DL = 6.263$$

$$BEC = 80.95$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-21.837	111.11	0.0007	P	4.2
2	☐	0.000	21.837	208.34	0.0014	P	20.3
3	☐	1000.000	979.585	2333.58	0.0150	P	6.7
4	☐	2500.000	2472.993	5604.01	0.0363	P	7.7
5	☐	5000.000	5210.009	11293.60	0.0753	P	6.1
6	☐	10000.000	10252.460	22554.26	0.1473	P	2.0
7	☐	20000.000	19825.664	43769.84	0.2838	P	3.4
8	☐			144.45	0.0009	P	46.9

$$y = 1.4260E-005 * x + 0.0011$$

$$R = 0.9998$$

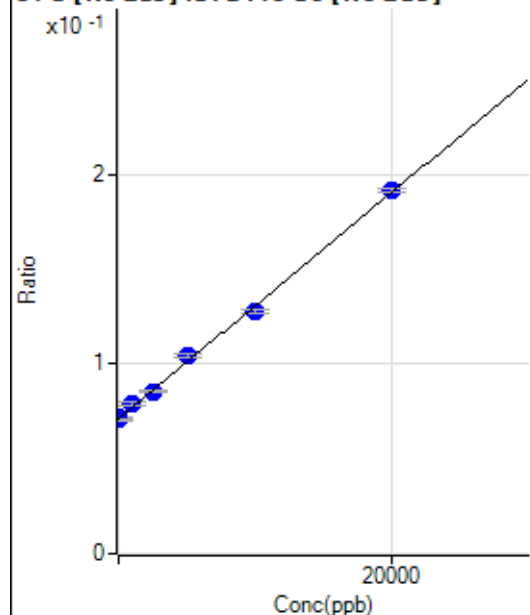
$$DL = 32.4$$

$$BEC = 73.95$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	78.728	326868.39	0.0717	P	1.8
2	☐	0.000	-78.728	337773.06	0.0708	P	1.5
3	☐	1000.000	1349.939	371316.30	0.0793	P	2.2
4	☐	2500.000	2420.096	412003.40	0.0857	P	1.6
5	☐	5000.000	5527.976	490856.35	0.1043	P	1.8
6	☐	10000.000	9467.363	620444.45	0.1278	P	2.2
7	☐	20000.000	20126.815	933586.92	0.1915	P	1.2
8	☐			302280.21	0.0596	P	2.2

$$y = 5.9735E-006 * x + 0.0713$$

R = 0.9989

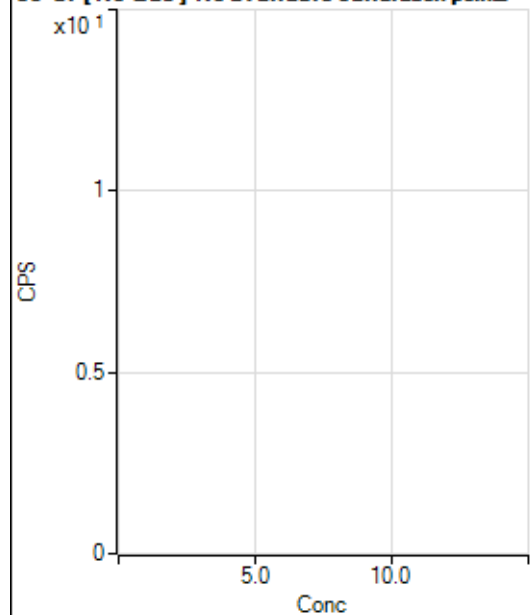
DL = 596.7

BEC = 1.193E+04

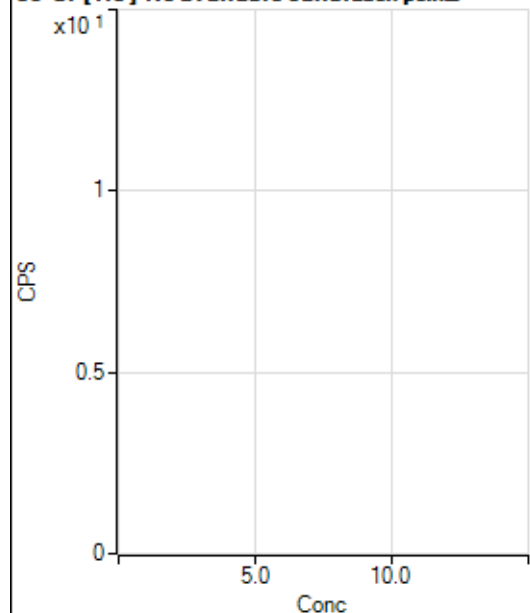
Weight: <None>

Min Conc: 0

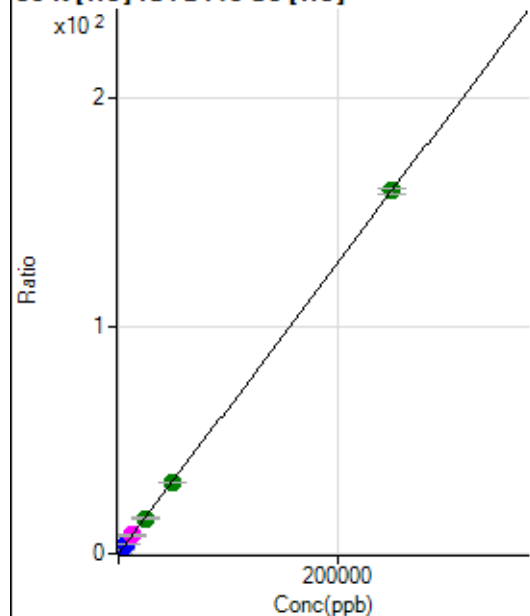
35 Cl [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1001390.42		P	0.6
2	☐			722490.39		P	0.6
3	☐			644372.96		P	1.1
4	☐			599809.64		P	2.1
5	☐			553775.27		P	0.9
6	☐			531895.47		P	1.4
7	☐			514754.44		P	1.1
8	☐			508570.26		P	0.6

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6368.21		P	1.8
2	☐			4623.09		P	3.7
3	☐			4281.32		P	3.5
4	☐			4084.02		P	7.0
5	☐			3733.91		P	4.9
6	☐			3358.82		P	8.9
7	☐			3353.26		P	2.5
8	☐			3364.38		P	4.0

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15480.91	0.1038	P	4.5
2	☐	500.000	481.857	62564.04	0.4105	P	1.2
3	☐	2500.000	2499.015	263087.66	1.6946	P	0.8
4	☐	6250.000	6160.954	621449.16	4.0258	P	0.3
5	☐	12500.000	12668.332	1224131.82	8.1684	M	3.7
6	☐	25000.000	24364.562	2391485.41	15.6143	A	2.2
7	☐	50000.000	48732.211	4801740.21	31.1268	A	1.2
8	☐	250000.00	250310.95	25289222.96	159.4521	A	1.5

$$y = 6.3660\text{E-}004 * x + 0.1038$$

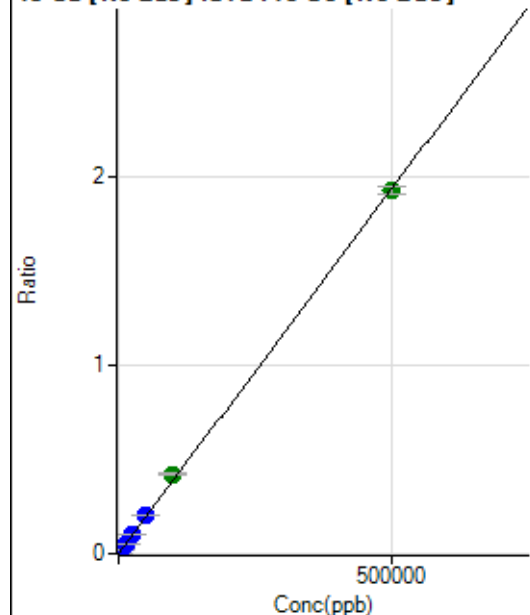
$$R = 1.0000$$

$$DL = 21.89$$

$$BEC = 163$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200.81	0.0000	P	7.4
2	☐	500.000	494.141	9342.30	0.0020	P	1.5
3	☐	5000.000	5467.582	99336.69	0.0212	P	2.0
4	☐	12500.000	13436.545	250353.36	0.0521	P	1.6
5	☐	25000.000	27138.893	494887.19	0.1052	P	2.5
6	☐	50000.000	53268.123	1001716.79	0.2064	P	1.4
7	☐	100000.00	109451.54	2066744.42	0.4240	A	3.1
8	☐	500000.00	497647.85	9781934.56	1.9275	A	2.1

$$y = 3.8731E-006 * x + 4.4067E-005$$

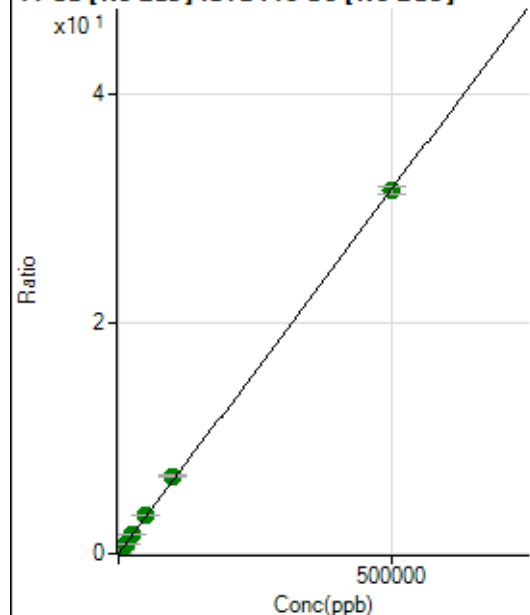
R = 0.9998

DL = 2.511

BEC = 11.38

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22442.24	0.0049	P	0.6
2	☐	500.000	493.183	172414.75	0.0361	P	1.5
3	☐	5000.000	5656.138	1698829.27	0.3629	A	1.2
4	☐	12500.000	13249.153	4053765.32	0.8434	A	2.3
5	☐	25000.000	26544.787	7930354.09	1.6847	A	2.3
6	☐	50000.000	52788.007	16241056.46	3.3455	A	1.5
7	☐	100000.00	106874.63	32985231.07	6.7682	A	4.0
8	☐	500000.00	498243.75	160053786.8	31.5350	A	2.3

$$y = 6.3282E-005 * x + 0.0049$$

R = 0.9999

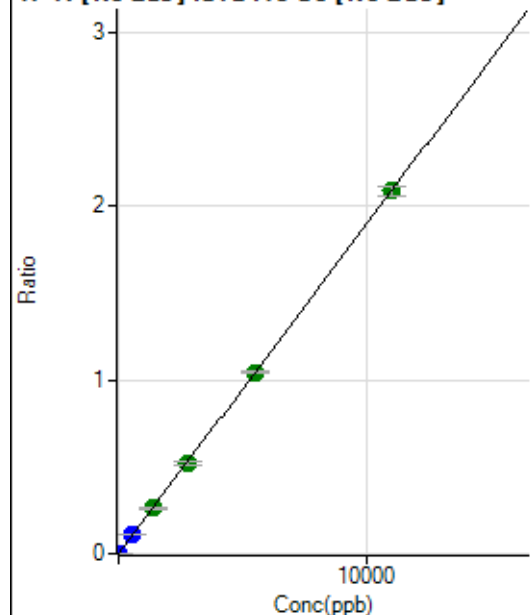
DL = 1.411

BEC = 77.81

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	341.68	0.0001	P	5.9
2	☐	5.000	5.181	5053.81	0.0011	P	6.3
3	☐	550.000	581.191	517079.05	0.1105	P	2.1
4	☐	1375.000	1378.547	1258910.18	0.2619	A	1.8
5	☐	2750.000	2733.629	2443307.63	0.5193	A	3.8
6	☐	5500.000	5506.384	5076990.17	1.0459	A	1.9
7	☐	11000.000	10998.898	10184483.47	2.0891	A	3.0
8	☐			31322.14	0.0062	P	91.6

$$y = 1.8993\text{E-}004 * x + 7.5000\text{E-}005$$

$$R = 1.0000$$

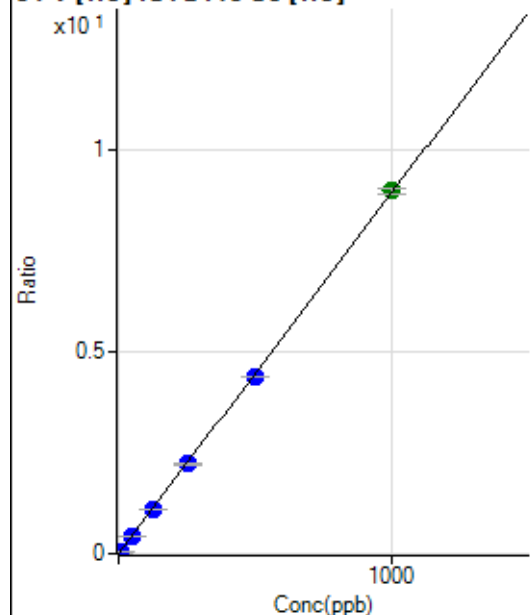
$$DL = 0.06949$$

$$BEC = 0.3949$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8.89	0.0001	P	57.3
2	☐	5.000	4.918	6699.40	0.0440	P	1.7
3	☐	50.000	49.663	68830.01	0.4434	P	0.5
4	☐	125.000	123.431	170073.10	1.1018	P	0.8
5	☐	250.000	249.070	333186.47	2.2233	P	1.3
6	☐	500.000	490.018	669977.32	4.3741	P	0.5
7	☐	1000.000	1005.437	1384396.32	8.9748	A	1.4
8	☐			515.62	0.0033	P	36.1

$$y = 0.0089 * x + 5.9983\text{E-}005$$

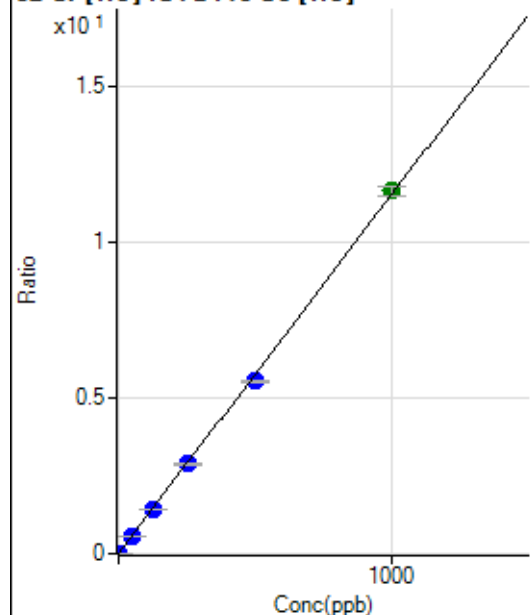
$$R = 0.9999$$

$$DL = 0.01155$$

$$BEC = 0.00672$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	775.58	0.0052	P	9.0
2	☐	2.000	1.800	3951.70	0.0259	P	2.6
3	☐	50.000	49.876	89908.63	0.5792	P	1.2
4	☐	125.000	122.007	217517.17	1.4092	P	0.8
5	☐	250.000	248.953	430122.78	2.8701	P	1.1
6	☐	500.000	479.887	846661.53	5.5276	P	0.6
7	☐	1000.000	1010.699	1794786.80	11.6361	A	2.8
8	☐			6676.13	0.0421	P	3.1

$$y = 0.0115 * x + 0.0052$$

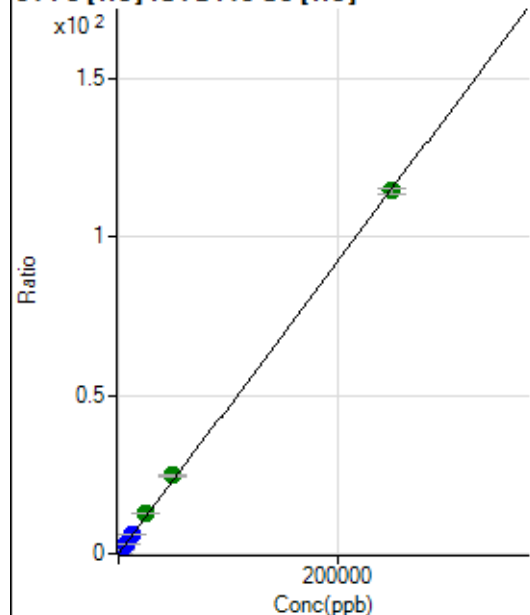
$$R = 0.9997$$

$$DL = 0.1217$$

$$BEC = 0.4524$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	524.10	0.0035	P	8.1
2	☐	50.000	54.500	4358.16	0.0286	P	0.6
3	☐	2500.000	2688.852	192681.82	1.2411	P	1.3
4	☐	6250.000	6620.492	470902.61	3.0508	P	0.8
5	☐	12500.000	13500.071	931725.60	6.2174	P	1.9
6	☐	25000.000	27498.964	1939283.65	12.6609	A	1.5
7	☐	50000.000	53574.804	3804786.57	24.6632	A	1.1
8	☐	250000.00	248973.98	18174899.48	114.6027	A	1.7

$$y = 4.6029E-004 * x + 0.0035$$

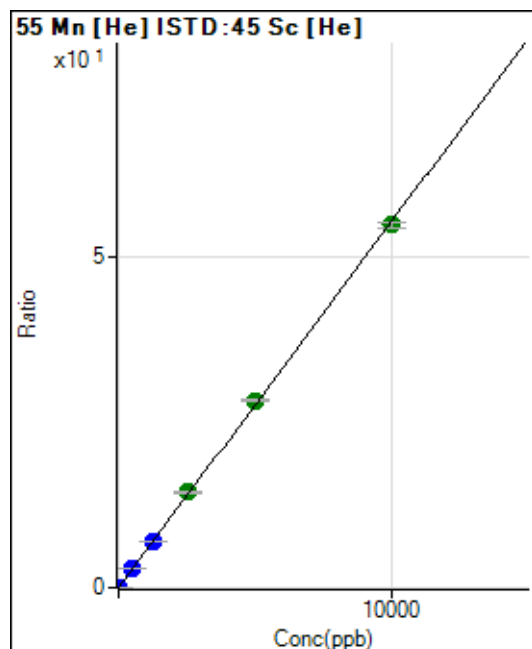
$$R = 0.9999$$

$$DL = 1.858$$

$$BEC = 7.617$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0003	P	27.1
2	☐	1.000	0.964	863.37	0.0057	P	9.5
3	☐	500.000	512.463	439960.65	2.8339	P	1.1
4	☐	1250.000	1252.787	1069234.32	6.9275	P	1.4
5	☐	2500.000	2612.495	2164930.30	14.4458	A	1.2
6	☐	5000.000	5118.796	4335037.26	28.3040	A	1.8
7	☐	10000.000	9911.507	8453747.37	54.8047	A	1.6
8	☐			6077.45	0.0383	P	11.5

$$y = 0.0055 * x + 3.3579E-004$$

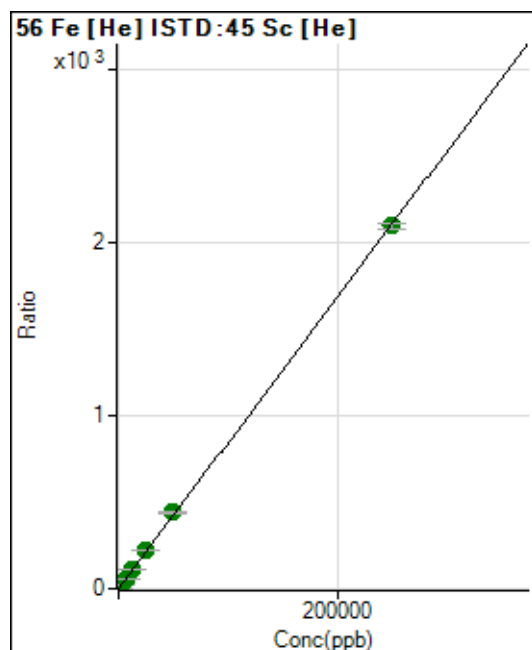
$$R = 0.9998$$

$$DL = 0.04938$$

$$BEC = 0.06073$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3126.32	0.0210	P	9.8
2	☐	50.000	51.975	69825.82	0.4581	P	1.1
3	☐	2500.000	2716.154	3548880.78	22.8649	A	3.3
4	☐	6250.000	6666.549	8657318.02	56.0892	A	2.1
5	☐	12500.000	13578.588	17117548.30	114.2221	A	1.6
6	☐	25000.000	26785.597	34506416.51	225.2981	A	2.2
7	☐	50000.000	52360.159	67931834.39	440.3900	A	1.5
8	☐	250000.00	249282.90	332492644.4	2.096585	A	1.2

$$y = 0.0084 * x + 0.0210$$

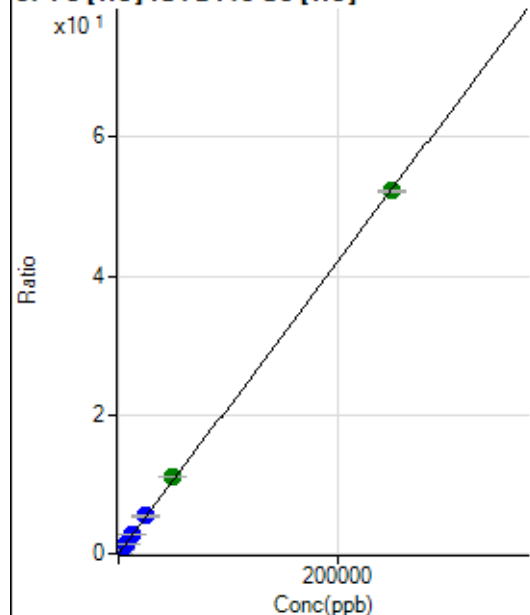
$$R = 0.9999$$

$$DL = 0.7337$$

$$BEC = 2.496$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	172.22	0.0012	P	27.8
2	☐	50.000	47.697	1701.98	0.0112	P	7.5
3	☐	2500.000	2663.971	86910.06	0.5599	P	2.4
4	☐	6250.000	6598.250	213809.91	1.3851	P	0.4
5	☐	12500.000	13234.867	416175.99	2.7771	P	1.4
6	☐	25000.000	25793.720	828879.51	5.4112	P	0.6
7	☐	50000.000	53147.531	1719814.74	11.1485	A	0.6
8	☐	250000.00	249244.03	8291112.45	52.2785	A	0.7

$$y = 2.0974\text{E-}004 * x + 0.0012$$

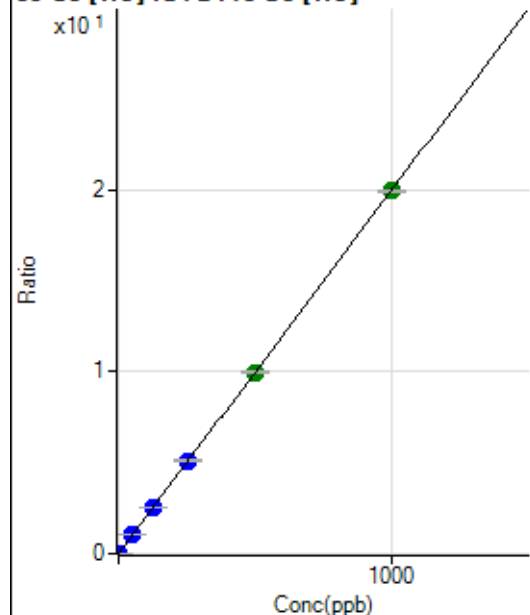
R = 0.9999

DL = 4.608

BEC = 5.533

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57.78	0.0004	P	44.9
2	☐	1.000	1.013	3137.05	0.0206	P	5.1
3	☐	50.000	51.423	159295.02	1.0261	P	0.4
4	☐	125.000	125.222	385594.57	2.4981	P	0.6
5	☐	250.000	255.322	763247.67	5.0931	P	1.4
6	☐	500.000	500.047	1527770.10	9.9744	A	1.4
7	☐	1000.000	998.547	3072514.75	19.9175	A	0.8
8	☐			7886.73	0.0497	P	4.2

$$y = 0.0199 * x + 3.8329\text{E-}004$$

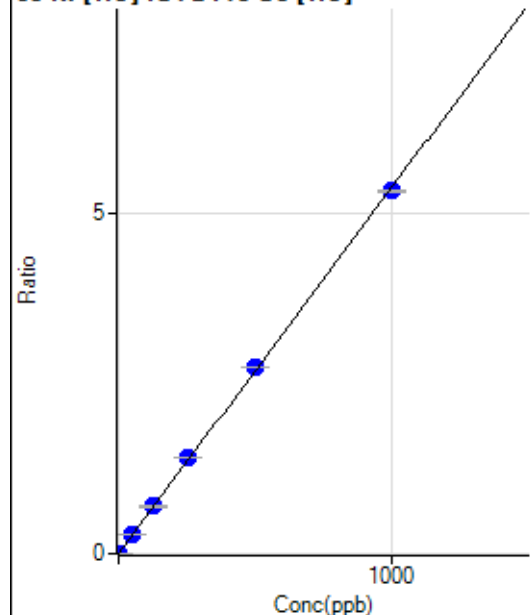
R = 1.0000

DL = 0.02587

BEC = 0.01922

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40.00	0.0003	P	35.8
2	☐	1.000	1.013	871.15	0.0057	P	3.0
3	☐	50.000	52.575	43940.15	0.2831	P	2.0
4	☐	125.000	129.341	107431.44	0.6960	P	1.7
5	☐	250.000	261.741	211024.10	1.4081	P	0.3
6	☐	500.000	509.742	420000.91	2.7420	P	0.8
7	☐	1000.000	991.522	822735.43	5.3334	P	0.5
8	☐			3173.72	0.0200	P	1.5

$$y = 0.0054 * x + 2.6615E-004$$

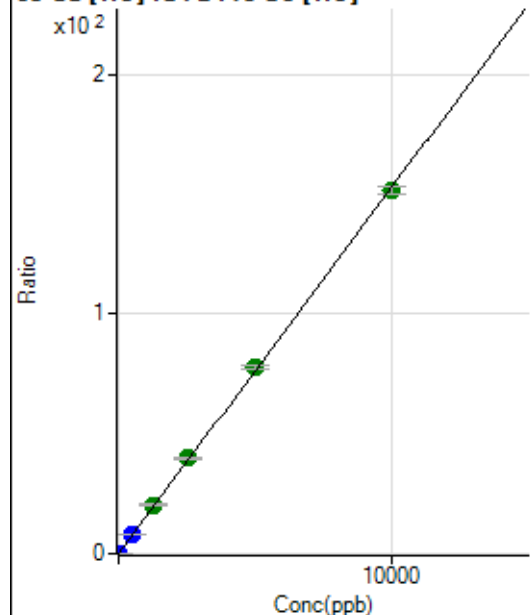
$$R = 0.9999$$

$$DL = 0.05315$$

$$BEC = 0.04948$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	692.25	0.0046	P	5.0
2	☐	2.000	2.129	5663.41	0.0372	P	1.0
3	☐	500.000	531.709	1261512.13	8.1266	P	1.5
4	☐	1250.000	1332.456	3142962.94	20.3581	A	1.9
5	☐	2500.000	2610.946	5977480.40	39.8872	A	2.1
6	☐	5000.000	5097.336	11926829.68	77.8672	A	1.3
7	☐	10000.000	9911.703	23355195.49	151.4074	A	2.0
8	☐			14627.81	0.0922	P	6.5

$$y = 0.0153 * x + 0.0046$$

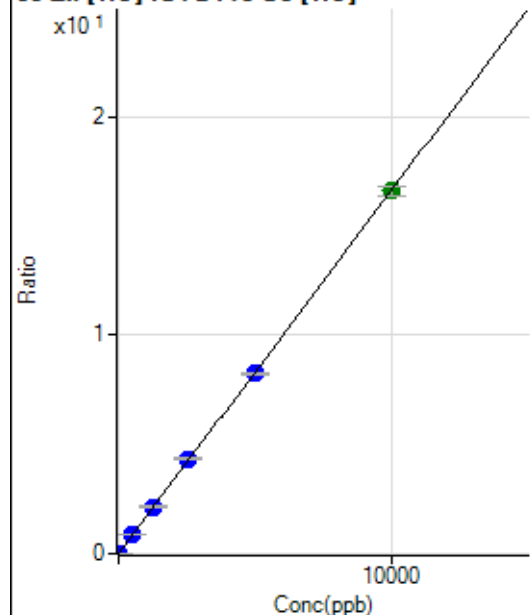
$$R = 0.9998$$

$$DL = 0.04586$$

$$BEC = 0.3038$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	113.33	0.0008	P	11.1
2	☐	2.000	2.336	706.69	0.0046	P	4.7
3	☐	500.000	525.991	135872.36	0.8751	P	0.9
4	☐	1250.000	1292.928	331875.08	2.1500	P	1.0
5	☐	2500.000	2604.433	648901.87	4.3301	P	2.7
6	☐	5000.000	4964.386	1264210.66	8.2531	P	1.0
7	☐	10000.000	9985.033	2560701.35	16.5990	A	2.4
8	☐			3588.29	0.0226	P	5.1

$$y = 0.0017 * x + 7.5617E-004$$

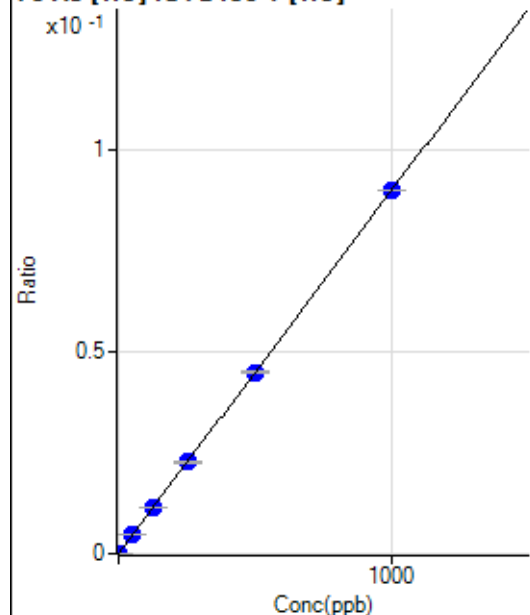
$$R = 0.9999$$

$$DL = 0.1518$$

$$BEC = 0.4549$$

Weight: <None>

Min Conc: 0

⁷⁵As [He] ISTD: ⁸⁹Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.00	0.0000	P	22.6
2	☐	1.000	1.024	162.02	0.0001	P	3.3
3	☐	50.000	51.592	7874.99	0.0046	P	2.5
4	☐	125.000	127.981	19269.06	0.0115	P	1.3
5	☐	250.000	253.330	37777.68	0.0228	P	1.7
6	☐	500.000	498.888	75547.93	0.0448	P	1.0
7	☐	1000.000	999.271	150151.56	0.0898	P	0.1
8	☐			89.68	0.0001	P	7.7

$$y = 8.9819E-005 * x + 6.7591E-006$$

$$R = 1.0000$$

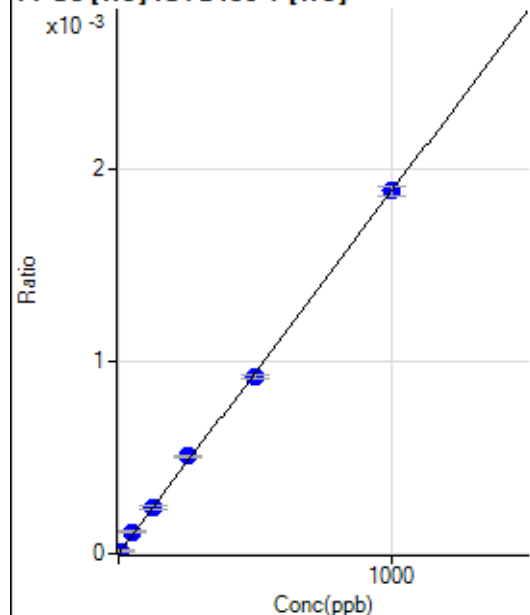
$$DL = 0.05094$$

$$BEC = 0.07525$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	6.132	18.89	0.0000	P	63.2
3	☐	50.000	59.056	188.89	0.0001	P	11.1
4	☐	125.000	127.123	401.12	0.0002	P	7.0
5	☐	250.000	268.991	841.14	0.0005	P	3.0
6	☐	500.000	487.223	1546.77	0.0009	P	2.8
7	☐	1000.000	1000.917	3153.72	0.0019	P	2.4
8	☐			3.33	0.0000	P	99.7

$$y = 1.8837\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

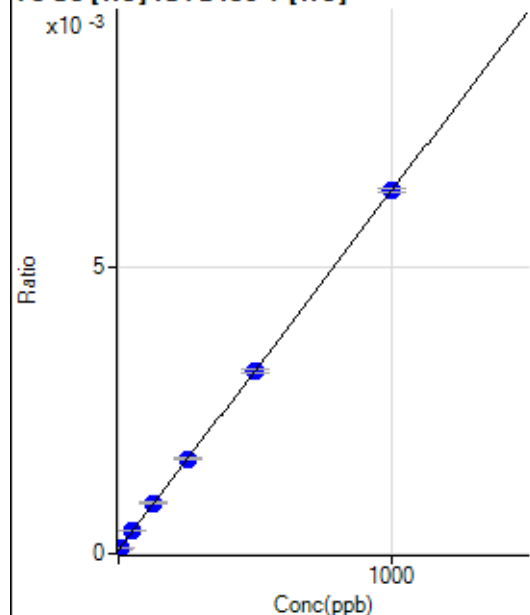
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	105.34	0.0001	P	16.4
2	☐	5.000	3.874	145.68	0.0001	P	10.6
3	☐	50.000	53.452	677.42	0.0004	P	6.0
4	☐	125.000	130.860	1480.57	0.0009	P	1.6
5	☐	250.000	253.474	2740.88	0.0017	P	2.5
6	☐	500.000	496.918	5351.90	0.0032	P	1.7
7	☐	1000.000	999.773	10576.71	0.0063	P	1.2
8	☐			98.01	0.0001	P	7.0

$$y = 6.2595\text{E-}006 * x + 6.4660\text{E-}005$$

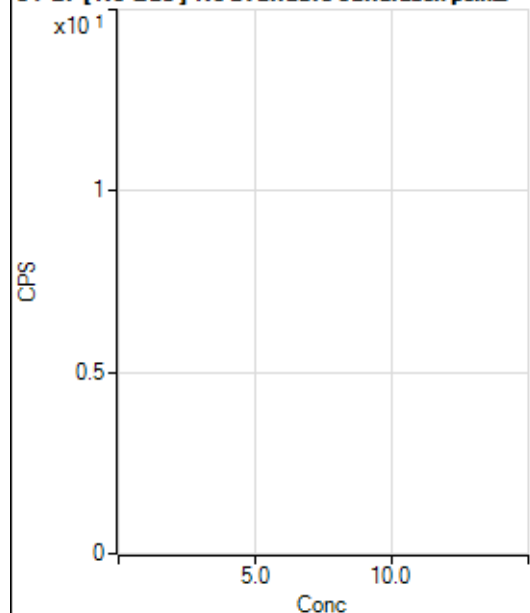
$$R = 1.0000$$

$$DL = 5.096$$

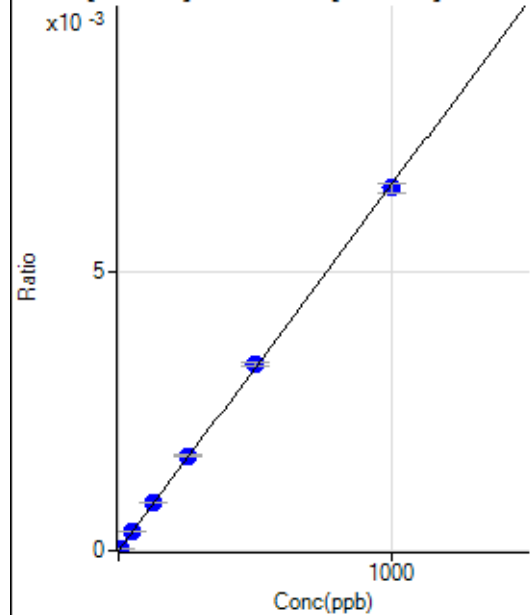
$$BEC = 10.33$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19099.48		P	2.2
2	☐			19844.78		P	6.3
3	☐			20954.38		P	3.2
4	☐			20830.54		P	5.6
5	☐			20600.01		P	5.1
6	☐			20673.59		P	2.9
7	☐			20316.10		P	4.4
8	☐			22264.11		P	3.0

82 Se [No Gas] ISTD: 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-96.47	0.0000	P	-767.
2	☐	5.000	5.970	484.15	0.0000	P	45.3
3	☐	50.000	51.154	5024.50	0.0003	P	3.9
4	☐	125.000	130.414	12838.76	0.0009	P	2.5
5	☐	250.000	259.369	25480.64	0.0017	P	1.7
6	☐	500.000	510.271	51550.55	0.0033	P	1.9
7	☐	1000.000	991.783	102532.19	0.0065	P	2.6
8	☐			167.41	0.0000	P	256.3

$$y = 6.5725E-006 * x - 6.7084E-006$$

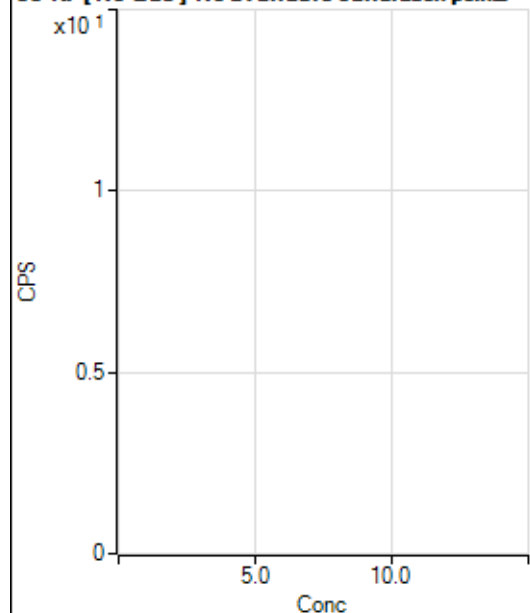
$$R = 0.9999$$

$$DL = 23.5$$

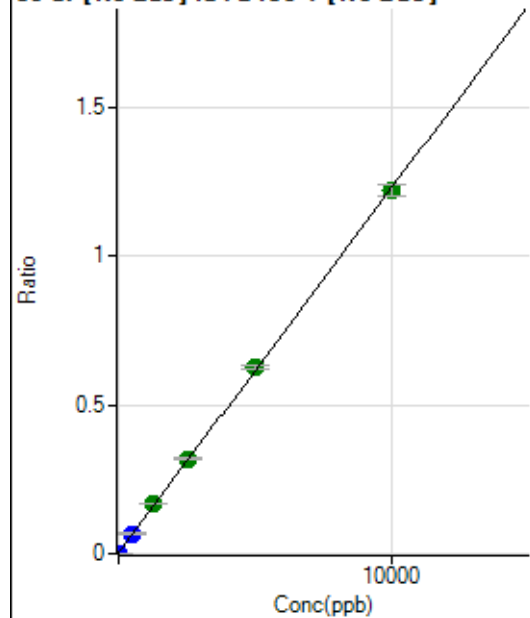
$$BEC = -1.021$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25896.80		P	1.4
2	☐			25588.76		P	1.2
3	☐			26069.99		P	1.7
4	☐			26115.91		P	0.3
5	☐			25248.59		P	2.0
6	☐			25797.43		P	1.0
7	☐			25850.45		P	1.3
8	☐			26015.72		P	0.2

86 Sr [No Gas] ISTD : 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	40698.70	0.0028	P	2.3
2	☐	1.000	-0.134	42359.37	0.0028	P	2.2
3	☐	500.000	519.310	1013245.13	0.0665	P	4.4
4	☐	1250.000	1338.835	2520198.45	0.1669	A	1.2
5	☐	2500.000	2584.456	4795214.65	0.3195	A	0.9
6	☐	5000.000	5085.289	9641165.84	0.6260	A	1.5
7	☐	10000.000	9924.172	19195938.97	1.2189	A	3.2
8	☐			94927.91	0.0059	P	29.1

$$y = 1.2253E-004 * x + 0.0028$$

$$R = 0.9999$$

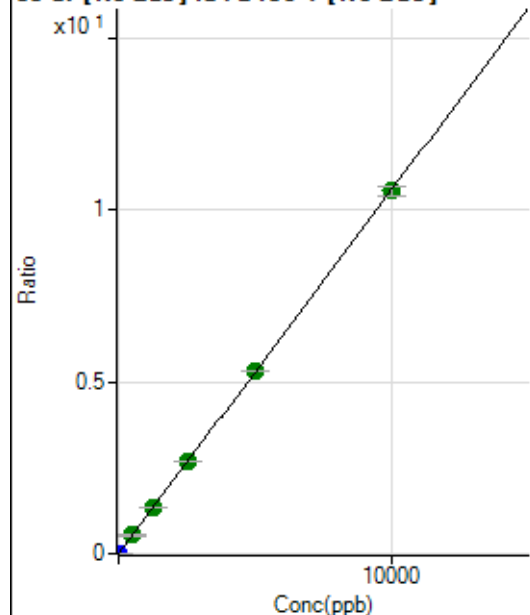
$$DL = 1.604$$

$$BEC = 23.22$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	269.45	0.0000	P	16.8
2	☐	1.000	1.006	16218.14	0.0011	P	2.2
3	☐	500.000	502.890	8107207.65	0.5318	A	4.3
4	☐	1250.000	1277.730	20401524.59	1.3512	A	0.2
5	☐	2500.000	2547.529	40429382.15	2.6939	A	1.2
6	☐	5000.000	5015.556	81693512.24	5.3038	A	0.7
7	☐	10000.000	9976.729	166176912.0	10.5500	A	2.6
8	☐			489534.56	0.0305	P	49.3

$$y = 0.0011 * x + 1.8833E-005$$

$$R = 1.0000$$

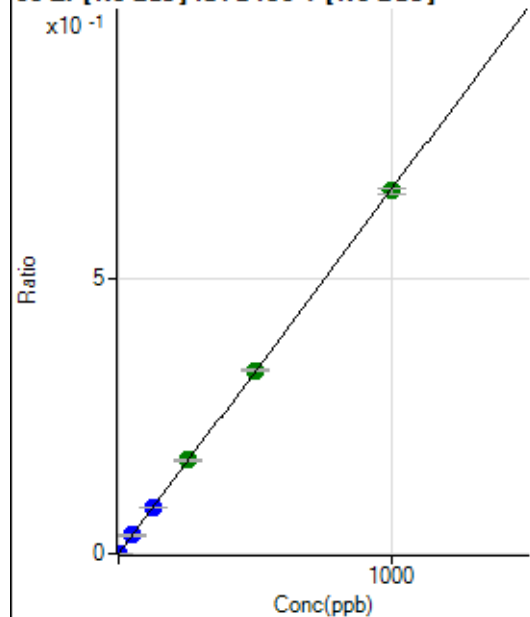
$$DL = 0.00898$$

$$BEC = 0.01781$$

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	580.58	0.0000	P	6.2
2	☐	1.000	0.956	10078.94	0.0007	P	5.1
3	☐	50.000	50.782	513133.72	0.0337	P	4.6
4	☐	125.000	128.248	1282950.84	0.0850	P	0.9
5	☐	250.000	258.274	2567273.06	0.1711	A	2.0
6	☐	500.000	503.288	5134155.45	0.3333	A	0.9
7	☐	1000.000	995.843	10386711.95	0.6595	A	1.4
8	☐			30951.19	0.0019	P	58.4

$$y = 6.6222E-004 * x + 4.0571E-005$$

$$R = 1.0000$$

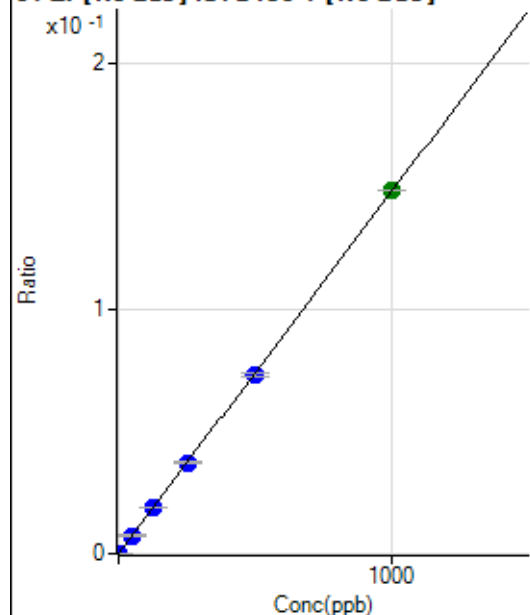
$$DL = 0.01148$$

$$BEC = 0.06127$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	111.12	0.0000	P	26.2
2	☐	1.000	0.896	2097.44	0.0001	P	3.3
3	☐	50.000	49.642	111762.01	0.0073	P	7.0
4	☐	125.000	126.838	283016.80	0.0187	P	0.8
5	☐	250.000	252.100	558903.19	0.0372	P	2.2
6	☐	500.000	494.151	1124425.70	0.0730	P	1.7
7	☐	1000.000	1002.188	2331615.46	0.1480	A	0.1
8	☐			6384.82	0.0004	P	53.0

$$y = 1.4771\text{E-}004 * x + 7.7651\text{E-}006$$

$$R = 1.0000$$

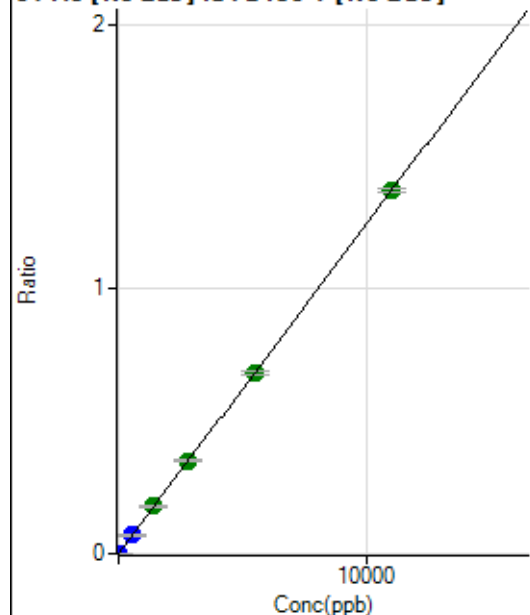
$$DL = 0.04139$$

$$BEC = 0.05257$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	238.90	0.0000	P	25.7
2	☐	5.000	6.187	11808.11	0.0008	P	3.2
3	☐	550.000	567.155	1077316.28	0.0707	P	6.0
4	☐	1375.000	1431.979	2695666.60	0.1786	A	2.2
5	☐	2750.000	2811.268	5260411.88	0.3505	A	1.7
6	☐	5500.000	5465.762	10496678.62	0.6815	A	1.7
7	☐	11000.000	10993.821	21589258.47	1.3707	A	1.0
8	☐			49701.77	0.0031	P	55.8

$$y = 1.2468\text{E-}004 * x + 1.6678\text{E-}005$$

$$R = 1.0000$$

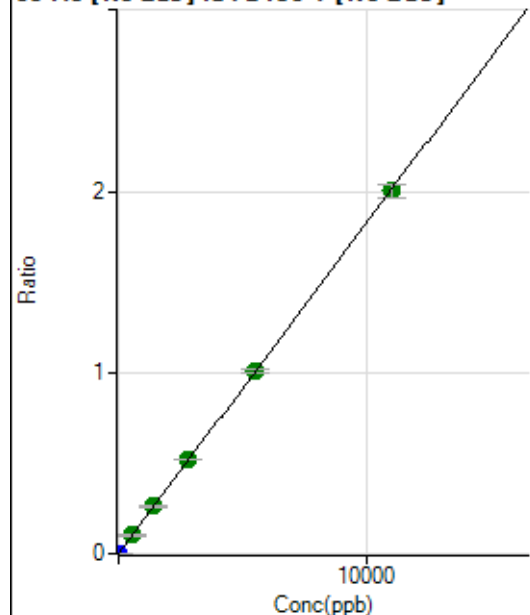
$$DL = 0.1033$$

$$BEC = 0.1338$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	43.7
2	☐	5.000	5.148	14202.05	0.0009	P	2.3
3	☐	550.000	569.580	1584763.35	0.1041	A	8.0
4	☐	1375.000	1424.541	3931658.72	0.2604	A	2.0
5	☐	2750.000	2830.638	7765714.06	0.5175	A	0.8
6	☐	5500.000	5528.839	15566286.11	1.0107	A	2.0
7	☐	11000.000	10958.250	31546286.81	2.0032	A	3.5
8	☐			79407.49	0.0049	P	60.7

$$y = 1.8280\text{E-}004 * x + 7.3856\text{E-}006$$

$$R = 1.0000$$

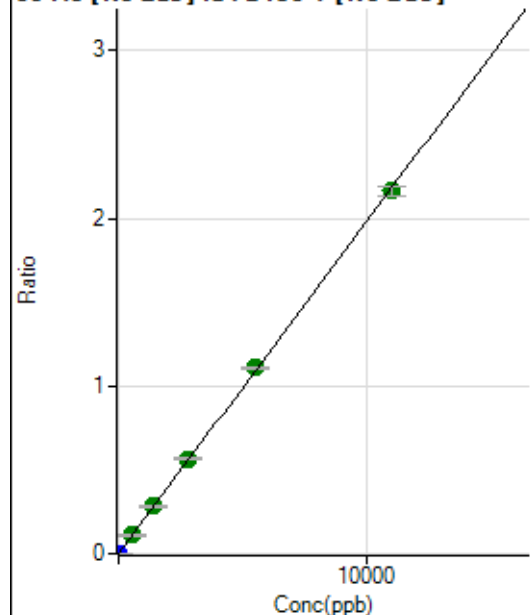
$$DL = 0.05299$$

$$BEC = 0.0404$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	275.01	0.0000	P	8.5
2	☐	5.000	5.169	15625.83	0.0010	P	2.7
3	☐	550.000	563.537	1702078.32	0.1117	A	5.4
4	☐	1375.000	1418.513	4244988.98	0.2812	A	2.8
5	☐	2750.000	2851.810	8483395.42	0.5653	A	1.2
6	☐	5500.000	5599.548	17096872.95	1.1099	A	0.6
7	☐	11000.000	10918.657	34078049.37	2.1643	A	2.6
8	☐			88949.93	0.0055	P	56.1

$$y = 1.9822\text{E-}004 * x + 1.9219\text{E-}005$$

$$R = 0.9999$$

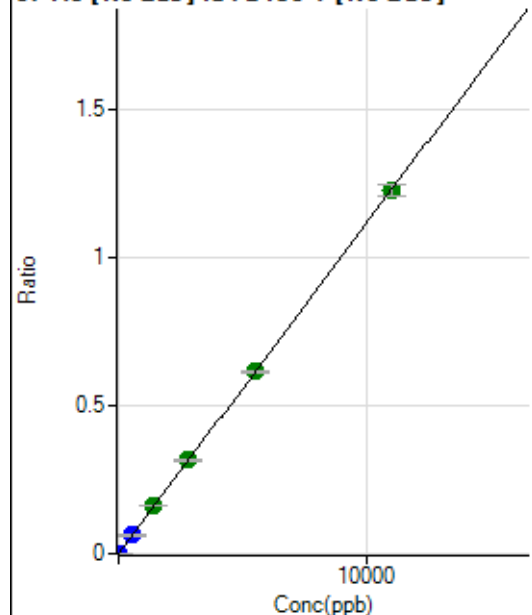
$$DL = 0.02461$$

$$BEC = 0.09696$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	75.00	0.0000	P	61.9
2	☐	5.000	5.050	8530.64	0.0006	P	1.8
3	☐	550.000	565.349	962503.58	0.0632	P	6.4
4	☐	1375.000	1433.894	2419914.03	0.1603	A	1.0
5	☐	2750.000	2833.871	4753578.41	0.3168	A	1.3
6	☐	5500.000	5506.439	9480395.27	0.6155	A	0.7
7	☐	11000.000	10967.684	19302939.67	1.2259	A	3.1
8	☐			47459.93	0.0030	P	61.3

$$y = 1.1178\text{E-}004 * x + 5.2337\text{E-}006$$

$$R = 1.0000$$

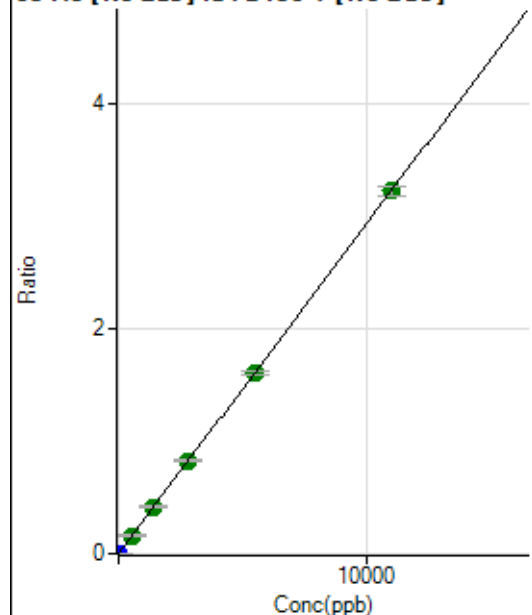
$$DL = 0.08691$$

$$BEC = 0.04682$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	211.12	0.0000	P	23.2
2	☐	5.000	5.160	22836.12	0.0015	P	6.0
3	☐	550.000	542.309	2420421.69	0.1588	A	5.3
4	☐	1375.000	1419.767	6278398.75	0.4158	A	1.5
5	☐	2750.000	2809.715	12349999.41	0.8229	A	1.7
6	☐	5500.000	5475.776	24699435.45	1.6037	A	2.5
7	☐	11000.000	10991.972	50688008.08	3.2193	A	3.0
8	☐			115889.70	0.0072	P	58.3

$$y = 2.9288\text{E-}004 * x + 1.4760\text{E-}005$$

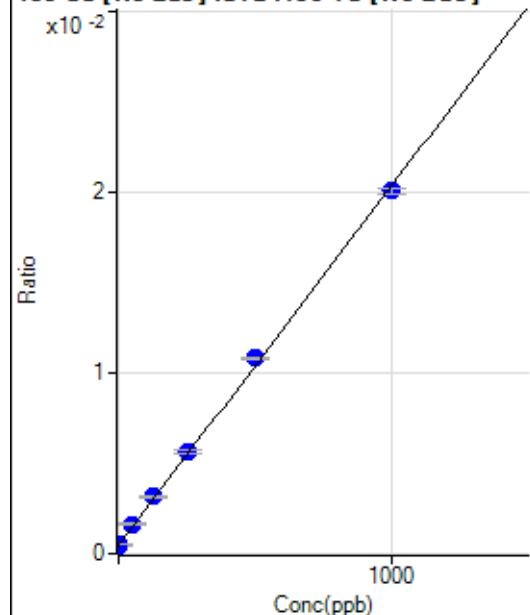
$$R = 1.0000$$

$$DL = 0.03511$$

$$BEC = 0.0504$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2775.36	0.0005	P	7.8
2	☐	1.000	2.400	3183.79	0.0005	P	4.9
3	☐	50.000	58.467	10254.14	0.0016	P	2.9
4	☐	125.000	134.817	19864.91	0.0031	P	2.4
5	☐	250.000	258.670	36627.33	0.0056	P	3.7
6	☐	500.000	520.760	71017.43	0.0108	P	1.4
7	☐	1000.000	985.800	134006.54	0.0201	P	1.3
8	☐			3670.13	0.0005	P	8.1

$$y = 1.9868\text{E-}005 * x + 4.6421\text{E-}004$$

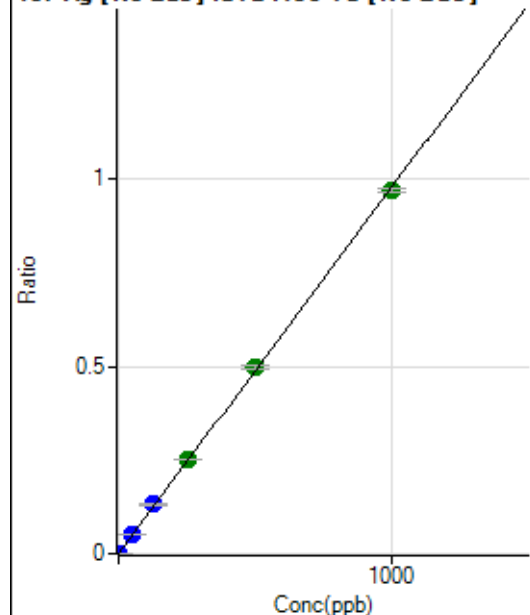
$$R = 0.9996$$

$$DL = 5.469$$

$$BEC = 23.36$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.11	0.0000	P	20.2
2	☐	1.000	1.006	6209.91	0.0010	P	3.0
3	☐	50.000	53.996	332948.38	0.0528	P	3.7
4	☐	125.000	134.701	832514.63	0.1317	P	2.9
5	☐	250.000	258.254	1651563.80	0.2525	A	1.0
6	☐	500.000	510.945	3281178.40	0.4996	A	1.6
7	☐	1000.000	991.052	6476479.83	0.9690	A	1.0
8	☐			2969.86	0.0004	P	13.7

$$y = 9.7772\text{E-}004 * x + 1.4402\text{E-}005$$

$$R = 0.9998$$

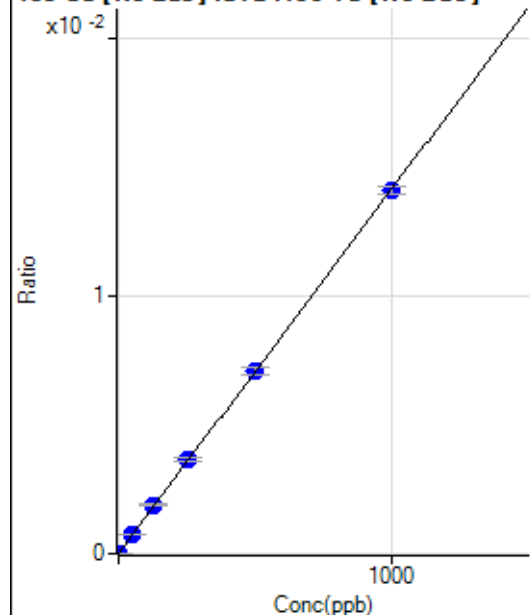
$$DL = 0.008943$$

$$BEC = 0.01473$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD:159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	10.0
2	☐	1.000	0.974	134.73	0.0000	P	7.4
3	☐	50.000	53.128	4782.85	0.0008	P	4.6
4	☐	125.000	132.832	11908.06	0.0019	P	4.4
5	☐	250.000	257.536	23831.98	0.0036	P	4.3
6	☐	500.000	502.473	46665.34	0.0071	P	4.0
7	☐	1000.000	995.744	94066.16	0.0141	P	2.0
8	☐			286.14	0.0000	P	61.1

$$y = 1.4128\text{E-}005 * x + 7.8967\text{E-}006$$

$$R = 0.9999$$

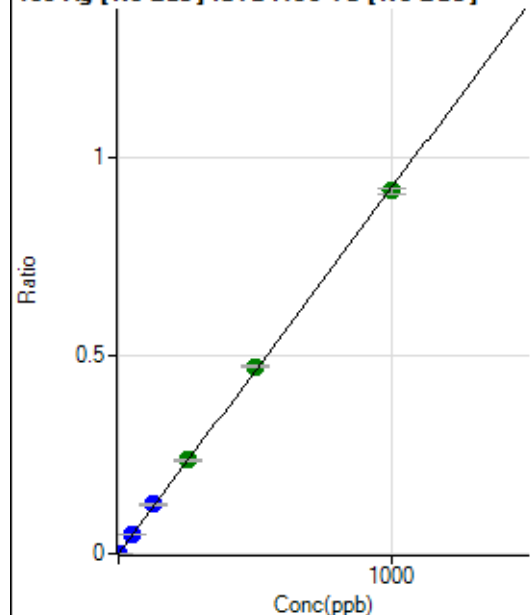
$$DL = 0.1681$$

$$BEC = 0.5589$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD:159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0000	P	18.3
2	☐	1.000	0.961	5604.10	0.0009	P	4.2
3	☐	50.000	53.389	311496.31	0.0494	P	3.3
4	☐	125.000	135.041	789706.58	0.1250	P	3.3
5	☐	250.000	255.101	1543017.09	0.2360	A	3.9
6	☐	500.000	511.015	3105896.55	0.4728	A	0.7
7	☐	1000.000	991.793	6132929.91	0.9176	A	1.5
8	☐			2664.23	0.0004	P	15.4

$$y = 9.2523\text{E-}004 * x + 1.1614\text{E-}005$$

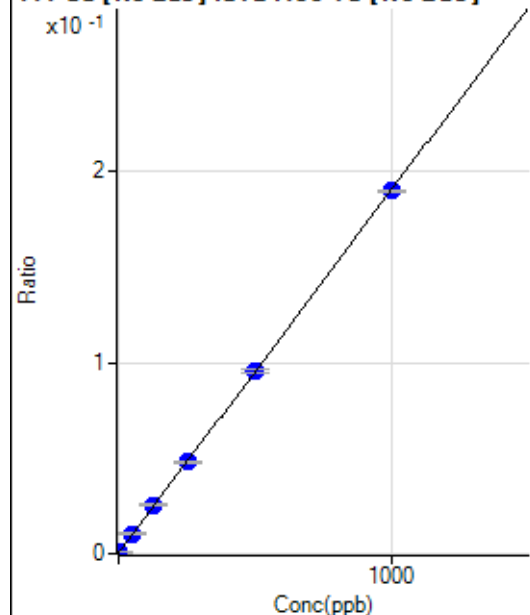
$$R = 0.9999$$

$$DL = 0.006908$$

$$BEC = 0.01255$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD:159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1938.86	0.0003	P	8.0
2	☐	1.000	1.167	3396.91	0.0005	P	3.8
3	☐	50.000	52.910	65489.16	0.0104	P	3.8
4	☐	125.000	131.952	160687.65	0.0254	P	2.3
5	☐	250.000	251.329	314676.49	0.0481	P	2.3
6	☐	500.000	503.240	630744.75	0.0960	P	2.3
7	☐	1000.000	997.033	1269655.57	0.1900	P	0.9
8	☐			5230.56	0.0007	P	34.0

$$y = 1.9020\text{E-}004 * x + 3.2429\text{E-}004$$

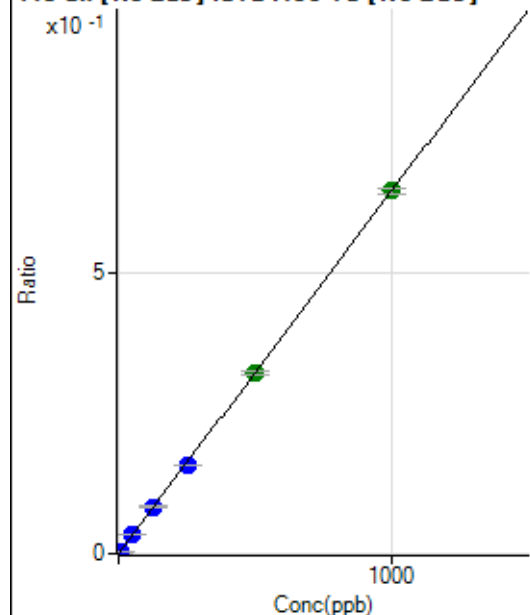
$$R = 1.0000$$

$$DL = 0.4085$$

$$BEC = 1.705$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD:159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	669.49	0.0001	P	16.9
2	☐	5.000	4.959	20655.12	0.0033	P	2.7
3	☐	50.000	50.978	208709.00	0.0331	P	2.2
4	☐	125.000	129.766	531323.58	0.0841	P	5.0
5	☐	250.000	243.894	1032697.14	0.1579	P	1.7
6	☐	500.000	500.455	2127579.06	0.3240	A	2.0
7	☐	1000.000	1000.654	4328587.29	0.6476	A	1.5
8	☐			12167.47	0.0017	P	39.3

$$y = 6.4710\text{E-}004 * x + 1.1185\text{E-}004$$

$$R = 1.0000$$

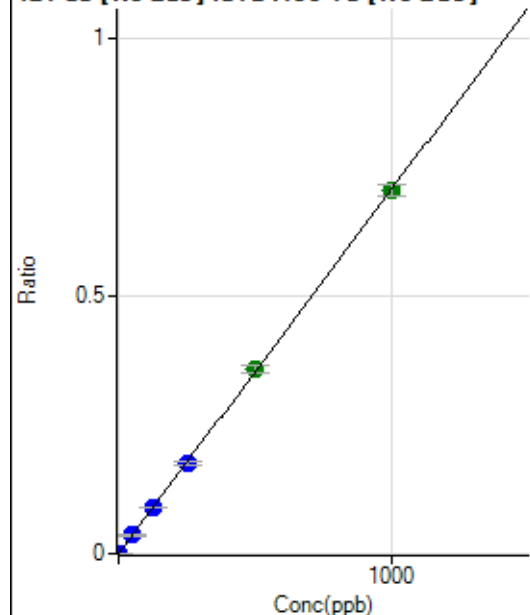
$$DL = 0.08741$$

$$BEC = 0.1728$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	44.45	0.0000	P	46.4
2	☐	2.000	1.939	8583.48	0.0014	P	1.6
3	☐	50.000	50.555	225701.93	0.0358	P	2.1
4	☐	125.000	127.306	569629.56	0.0901	P	2.4
5	☐	250.000	247.956	1147500.78	0.1755	P	2.8
6	☐	500.000	507.924	2360595.04	0.3595	A	3.9
7	☐	1000.000	996.233	4712492.42	0.7052	A	3.3
8	☐			12157.45	0.0017	P	46.2

$$y = 7.0786\text{E-}004 * x + 7.4172\text{E-}006$$

$$R = 0.9999$$

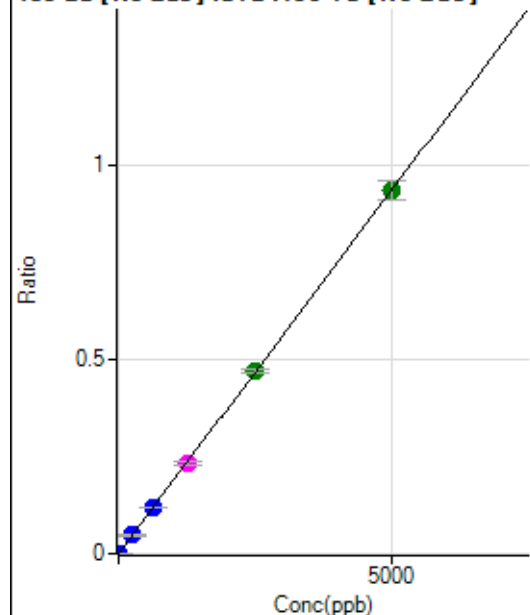
$$DL = 0.01458$$

$$BEC = 0.01048$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	33.33	0.0000	P	75.2
2	☐	10.000	9.740	11357.85	0.0018	P	1.7
3	☐	250.000	251.816	296772.88	0.0471	P	3.7
4	☐	625.000	638.616	754533.33	0.1194	P	2.7
5	☐	1250.000	1244.004	1520178.52	0.2325	M	3.2
6	☐	2500.000	2513.259	3084916.41	0.4698	A	2.8
7	☐	5000.000	4993.077	6235604.56	0.9333	A	5.2
8	☐			18903.53	0.0027	P	57.0

$$y = 1.8692\text{E-}004 * x + 5.5673\text{E-}006$$

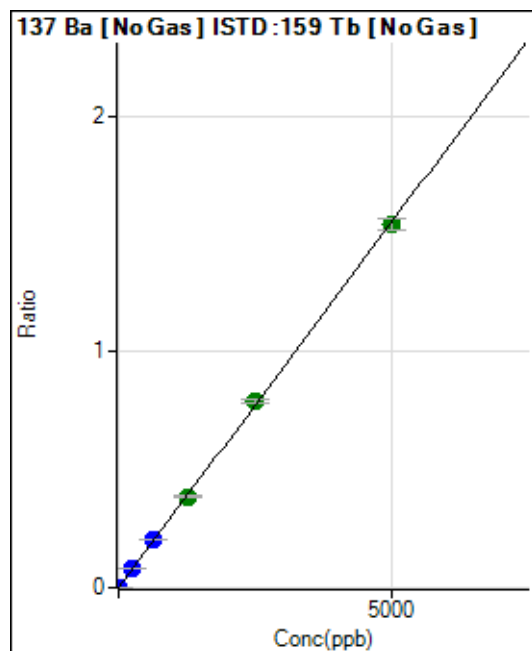
$$R = 1.0000$$

$$DL = 0.06722$$

$$BEC = 0.02978$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	121.4
2	☐	10.000	10.198	19670.46	0.0032	P	6.0
3	☐	250.000	260.351	508252.34	0.0806	P	4.4
4	☐	625.000	667.291	1306633.36	0.2067	P	0.6
5	☐	1250.000	1245.108	2520952.03	0.3856	A	2.9
6	☐	2500.000	2559.187	5205474.51	0.7926	A	2.5
7	☐	5000.000	4965.825	10277141.03	1.5380	A	3.1
8	☐			35134.05	0.0050	P	51.6

$$y = 3.0971E-004 * x + 4.6536E-006$$

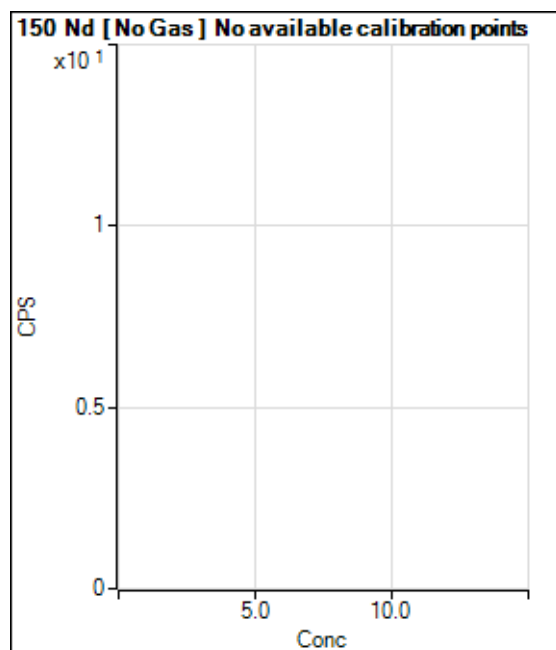
$$R = 0.9999$$

$$DL = 0.05473$$

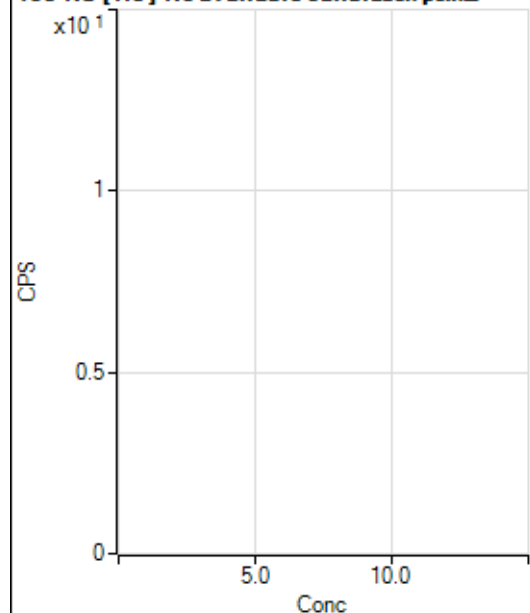
$$BEC = 0.01503$$

Weight: <None>

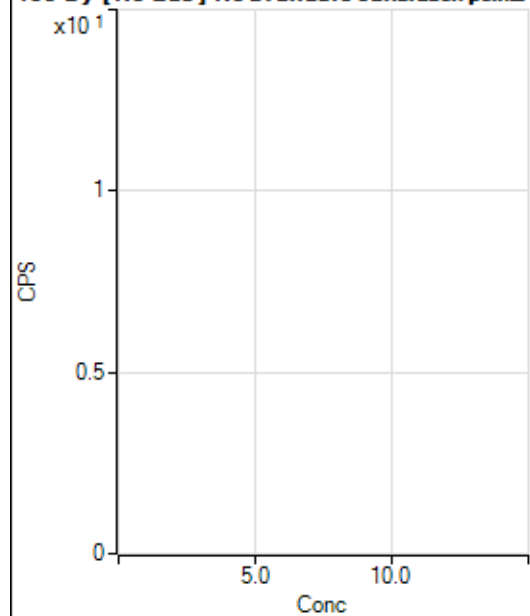
Min Conc: 0



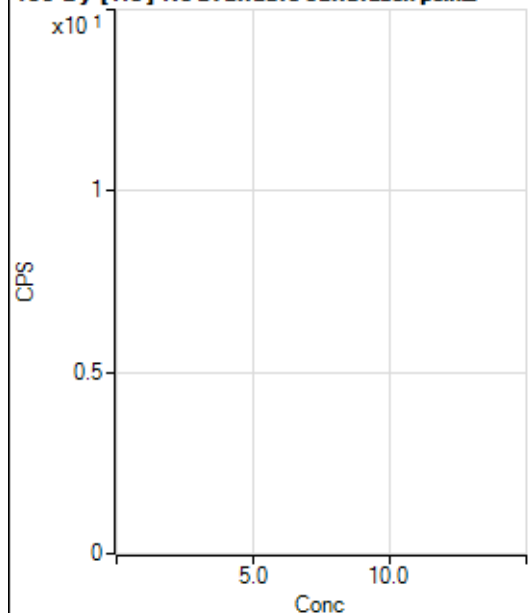
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.45		P	86.6
2	☐			6.67		P	0.0
3	☐			20.00		P	120.2
4	☐			35.56		P	21.6
5	☐			73.34		P	18.2
6	☐			126.67		P	5.3
7	☐			240.01		P	22.7
8	☐			48.89		P	20.8

150 Nd [He] No available calibration points

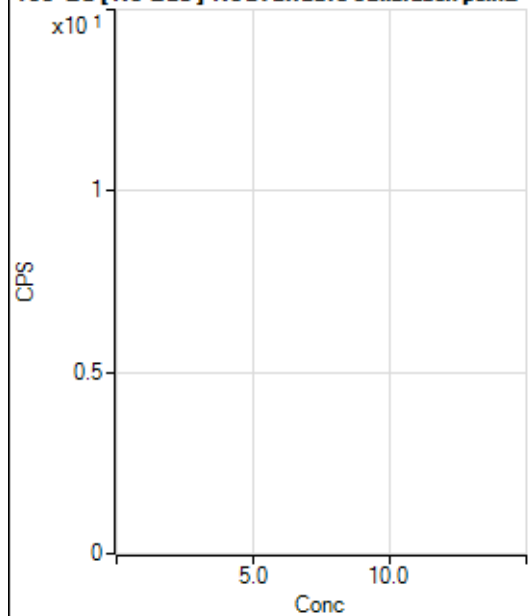
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			2.22		P	173.2
3	☐			1.11		P	173.2
4	☐			4.44		P	114.6
5	☐			12.22		P	41.7
6	☐			10.00		P	88.2
7	☐			20.00		P	44.1
8	☐			13.33		P	50.0

156 Dy [No Gas] No available calibration points

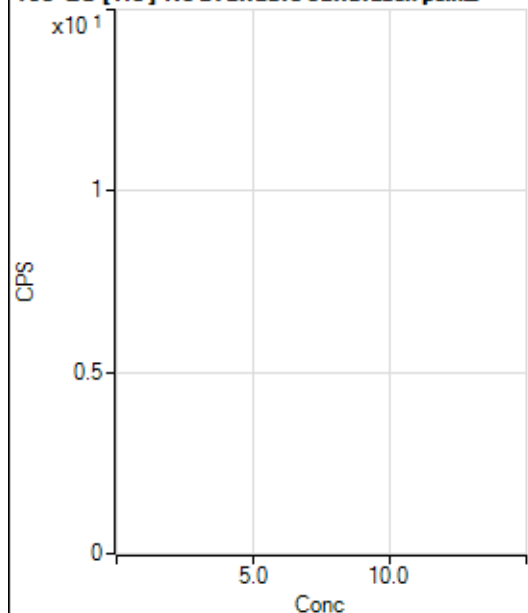
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	34.7
2	☐			8.33		P	100.0
3	☐			8.33		P	100.0
4	☐			27.78		P	69.3
5	☐			55.56		P	74.0
6	☐			130.56		P	28.8
7	☐			244.45		P	35.8
8	☐			800.05		P	6.3

156 Dy [He] No available calibration points

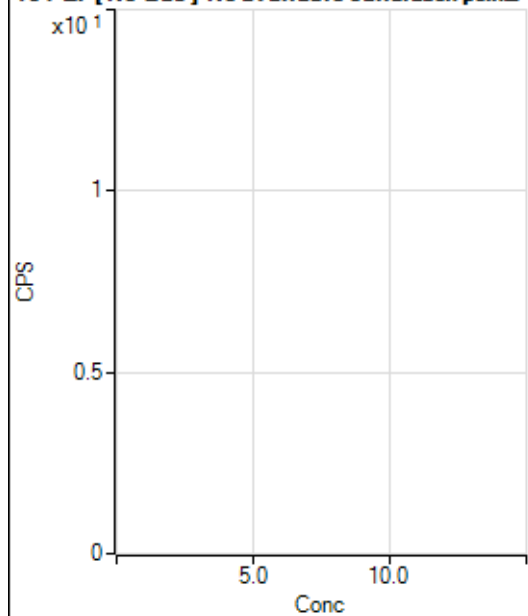
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			1.11		P	173.2
3	☐			5.56		P	91.6
4	☐			8.89		P	57.3
5	☐			34.44		P	36.6
6	☐			65.56		P	2.9
7	☐			127.78		P	13.1
8	☐			391.12		P	5.7

160 Gd [No Gas] Noavailable calibration poin...

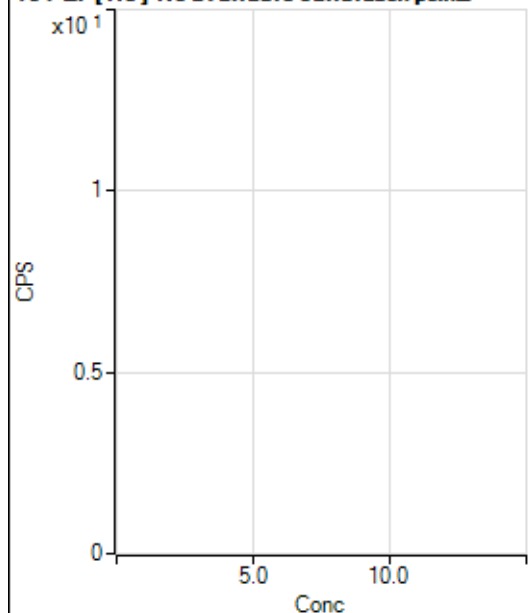
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.55		P	8.7
2	☐			25.00		P	66.7
3	☐			38.89		P	32.7
4	☐			50.00		P	16.7
5	☐			102.78		P	4.7
6	☐			102.78		P	4.7
7	☐			222.23		P	9.4
8	☐			769.49		P	6.6

160 Gd [He] No available calibration points

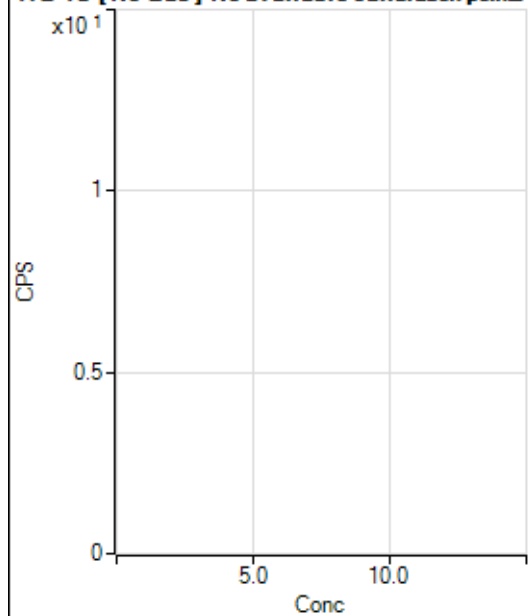
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.67		P	61.9
2	☐			55.56		P	27.1
3	☐			71.11		P	14.3
4	☐			55.56		P	22.7
5	☐			82.22		P	43.4
6	☐			94.45		P	11.3
7	☐			148.89		P	8.5
8	☐			467.79		P	5.4

164 Er [No Gas] No available calibration points

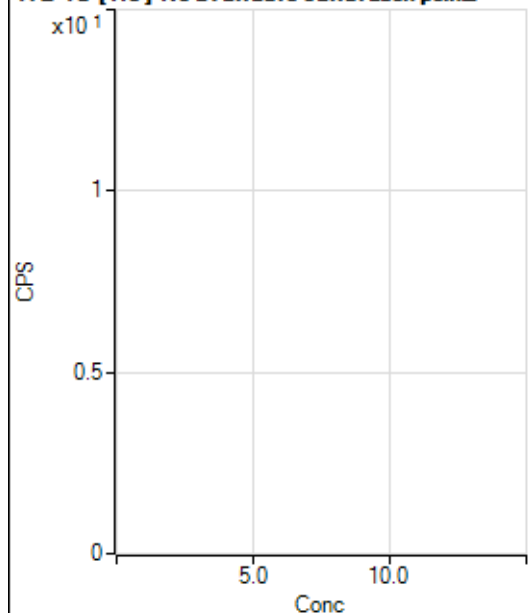
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	17.3
2	☐			50.00		P	72.7
3	☐			58.33		P	57.1
4	☐			72.22		P	24.0
5	☐			66.67		P	0.0
6	☐			69.45		P	30.2
7	☐			94.45		P	44.4
8	☐			152.78		P	20.7

164 Er [He] No available calibration points

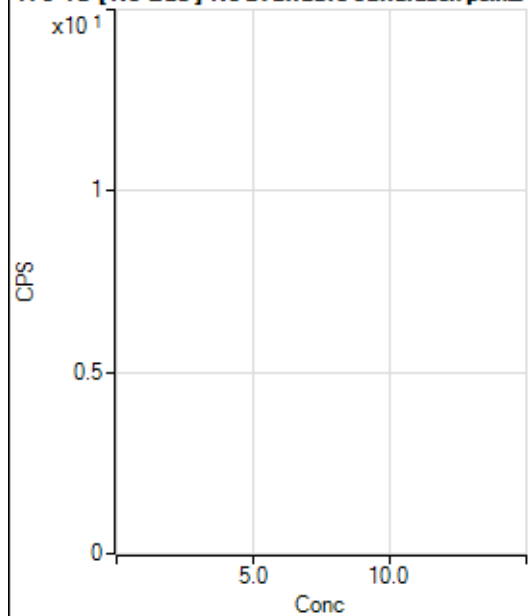
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	57.3
2	☐			17.78		P	60.3
3	☐			20.00		P	33.4
4	☐			21.11		P	32.9
5	☐			18.89		P	27.0
6	☐			23.34		P	24.7
7	☐			47.78		P	24.5
8	☐			81.11		P	16.6

172 Yb [No Gas] No available calibration points

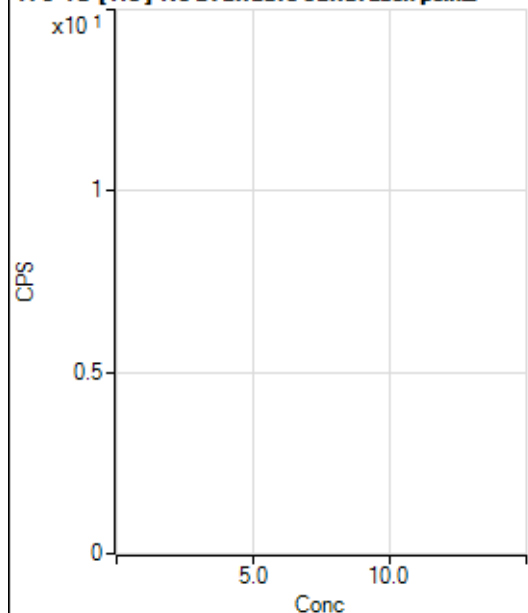
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	66.7
2	☐			25.00		P	33.3
3	☐			19.45		P	24.7
4	☐			30.56		P	41.7
5	☐			41.67		P	0.0
6	☐			30.56		P	41.7
7	☐			55.56		P	31.2
8	☐			88.89		P	14.3

172 Yb [He] No available calibration points

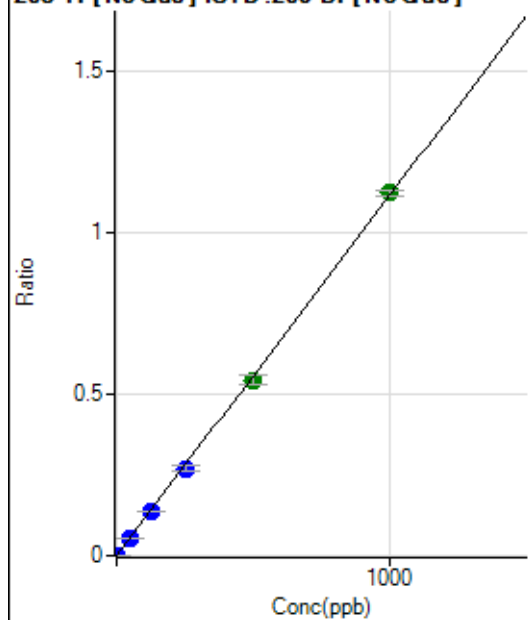
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.41		P	86.6
2	☐			14.82		P	78.1
3	☐			9.26		P	124.9
4	☐			25.93		P	75.2
5	☐			27.78		P	20.0
6	☐			16.67		P	33.3
7	☐			35.18		P	63.8
8	☐			48.15		P	17.6

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			536.14		P	17.5
2	☐			694.49		P	10.8
3	☐			1455.68		P	14.9
4	☐			2603.11		P	1.1
5	☐			4595.38		P	6.3
6	☐			8497.42		P	2.7
7	☐			17208.88		P	1.4
8	☐			908.39		P	14.3

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3778.40		P	12.0
2	☐			3761.72		P	4.8
3	☐			4156.30		P	11.9
4	☐			4817.65		P	4.8
5	☐			5814.35		P	3.1
6	☐			8021.10		P	2.8
7	☐			12257.76		P	4.4
8	☐			3867.30		P	1.7

203 Tl [No Gas] ISTD :209 Bi [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	608.37	0.0002	P	20.7
2	☐	1.000	0.910	3872.93	0.0012	P	4.5
3	☐	50.000	48.436	176942.85	0.0540	P	1.9
4	☐	125.000	123.518	454388.38	0.1375	P	2.4
5	☐	250.000	242.636	895523.17	0.2699	P	5.9
6	☐	500.000	487.966	1868210.87	0.5427	A	5.6
7	☐	1000.000	1008.122	3828877.56	1.1209	A	1.3
8	☐			9431.39	0.0029	P	55.9

$$y = 0.0011 * x + 1.9012E-004$$

$$R = 0.9999$$

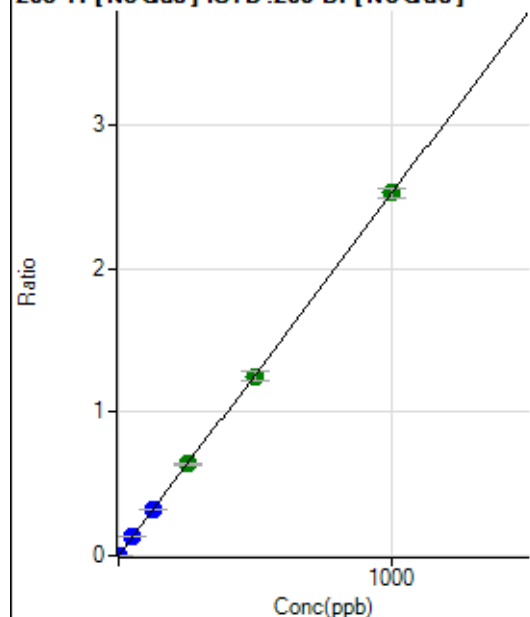
$$DL = 0.1064$$

$$BEC = 0.171$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1455.69	0.0005	P	9.3
2	☐	1.000	0.958	9273.04	0.0029	P	3.2
3	☐	50.000	50.954	423130.80	0.1292	P	2.2
4	☐	125.000	127.581	1066809.63	0.3228	P	3.1
5	☐	250.000	252.140	2116247.38	0.6376	A	3.8
6	☐	500.000	494.788	4305854.05	1.2508	A	5.7
7	☐	1000.000	1001.701	8646041.16	2.5317	A	2.9
8	☐			21608.38	0.0066	P	39.6

$$y = 0.0025 * x + 4.5537E-004$$

$$R = 1.0000$$

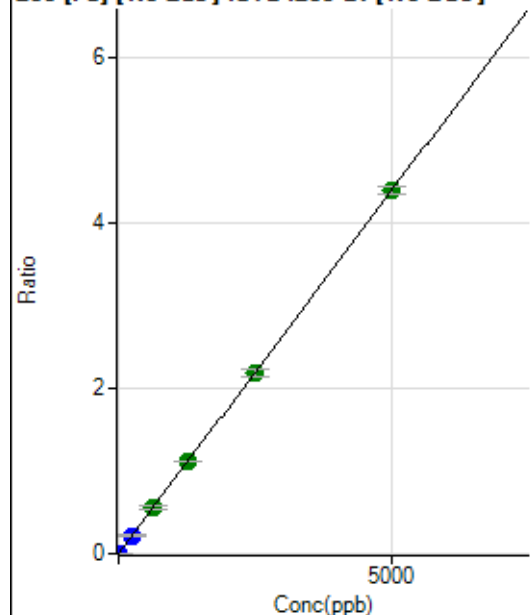
$$DL = 0.05045$$

$$BEC = 0.1802$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	988.95	0.0003	P	4.2
2	☐	1.000	0.991	3798.79	0.0012	P	2.1
3	☐	250.000	248.861	715395.34	0.2185	P	2.7
4	☐	625.000	639.079	1851656.81	0.5606	A	5.9
5	☐	1250.000	1270.066	3698337.79	1.1137	A	1.3
6	☐	2500.000	2489.185	7516904.51	2.1825	A	3.4
7	☐	5000.000	4998.688	14968180.31	4.3825	A	2.1
8	☐			42283.25	0.0130	P	56.6

$$y = 8.7667E-004 * x + 3.0925E-004$$

$$R = 1.0000$$

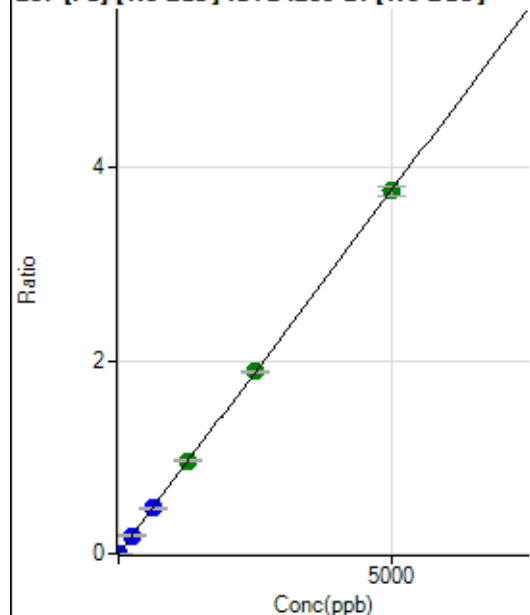
$$DL = 0.04473$$

$$BEC = 0.3528$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	913.01	0.0003	P	7.6
2	☐	1.000	1.029	3419.03	0.0011	P	1.0
3	☐	250.000	250.362	618311.66	0.1888	P	0.9
4	☐	625.000	623.685	1552710.55	0.4699	P	3.0
5	☐	1250.000	1277.749	3196214.25	0.9624	A	1.7
6	☐	2500.000	2501.665	6490898.35	1.8840	A	1.9
7	☐	5000.000	4992.376	12839531.08	3.7594	A	2.5
8	☐			38614.50	0.0118	P	54.4

$$y = 7.5298\text{E-}004 * x + 2.8553\text{E-}004$$

$$R = 1.0000$$

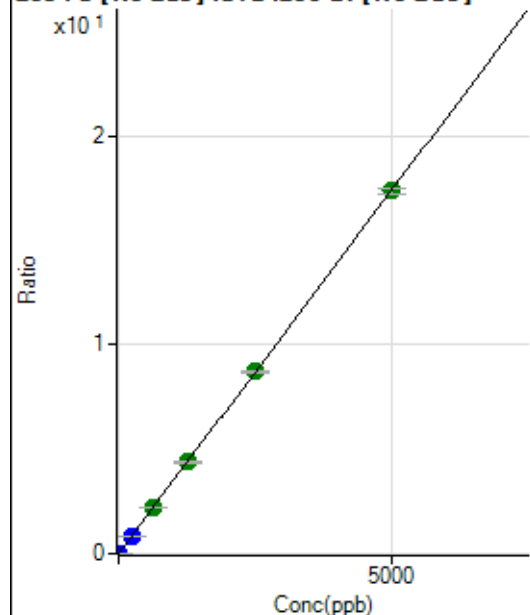
$$DL = 0.08648$$

$$BEC = 0.3792$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	4015.14	0.0013	P	3.0
2	☐	1.000	1.018	15461.36	0.0048	P	3.9
3	☐	250.000	249.511	2846532.97	0.8691	P	0.3
4	☐	625.000	634.869	7301187.07	2.2095	A	2.0
5	☐	1250.000	1265.482	14618932.54	4.4029	A	2.4
6	☐	2500.000	2502.376	29996219.31	8.7050	A	0.8
7	☐	5000.000	4993.732	59333414.87	17.3705	A	1.4
8	☐			164658.91	0.0505	P	52.9

$$y = 0.0035 * x + 0.0013$$

$$R = 1.0000$$

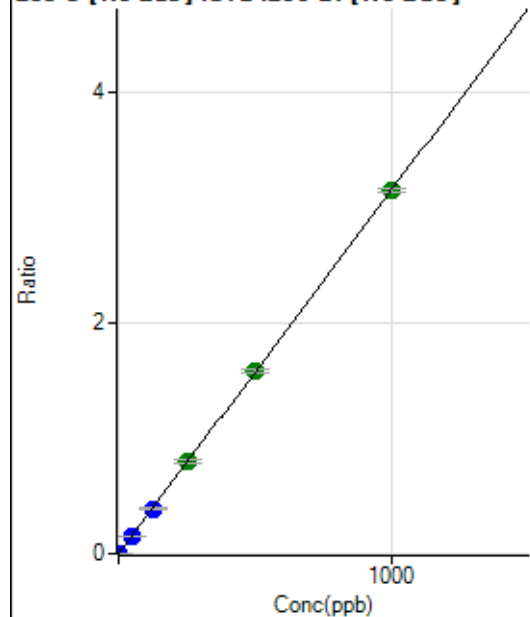
$$DL = 0.03283$$

$$BEC = 0.361$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	33.33	0.0000	P	74.6
2	☐	1.000	0.974	9915.28	0.0031	P	6.4
3	☐	50.000	48.435	499377.71	0.1525	P	1.8
4	☐	125.000	123.521	1285153.24	0.3889	P	1.8
5	☐	250.000	253.929	2652913.77	0.7994	A	4.7
6	☐	500.000	502.736	5452547.09	1.5828	A	1.9
7	☐	1000.000	997.913	10731766.82	3.1417	A	1.0
8	☐			25840.97	0.0079	P	59.2

$$y = 0.0031 * x + 1.0395E-005$$

$$R = 1.0000$$

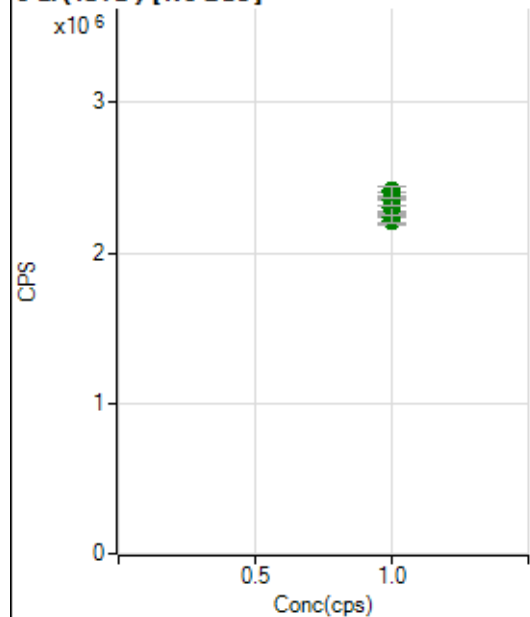
$$DL = 0.007387$$

$$BEC = 0.003302$$

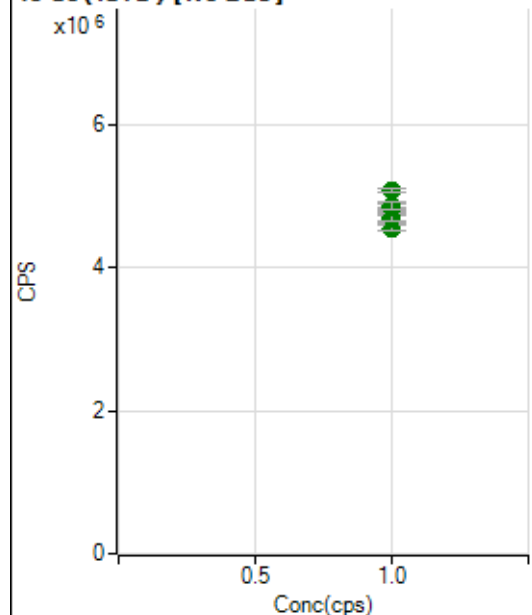
Weight: <None>

Min Conc: 0

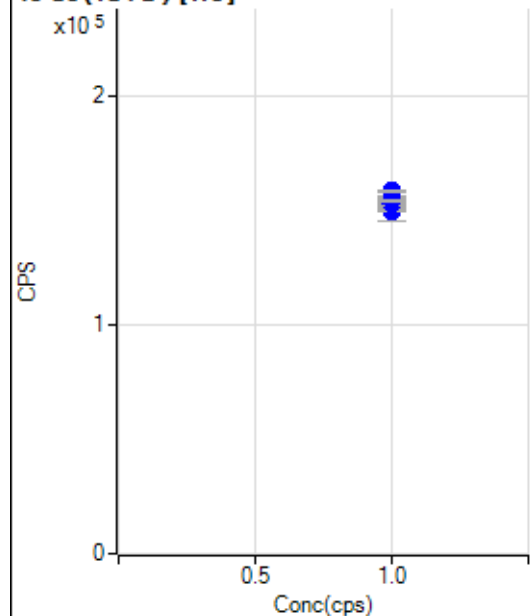
6 Li (ISTD) [No Gas]



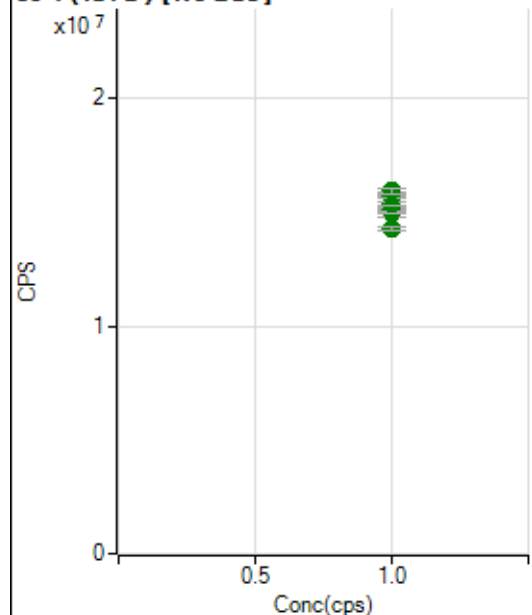
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2236991.86		A	3.5
2	☐	1.000		2212125.44		A	2.5
3	☐	1.000		2300388.94		A	4.7
4	☐	1.000		2235179.88		A	2.8
5	☐	1.000		2303515.50		A	4.5
6	☐	1.000		2356600.95		A	3.4
7	☐	1.000		2411244.43		A	3.0
8	☐	1.000		2403836.69		A	3.0

45 Sc (ISTD) [No Gas]

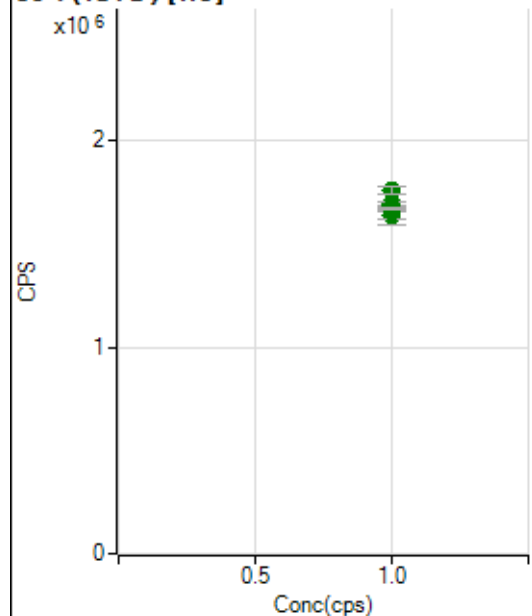
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4557847.19		A	1.7
2	☐	1.000		4772344.37		A	1.8
3	☐	1.000		4682709.34		A	2.4
4	☐	1.000		4807155.10		A	1.1
5	☐	1.000		4707943.75		A	2.3
6	☐	1.000		4854873.16		A	1.3
7	☐	1.000		4876210.55		A	2.0
8	☐	1.000		5075840.34		A	1.2

45 Sc (ISTD) [He]

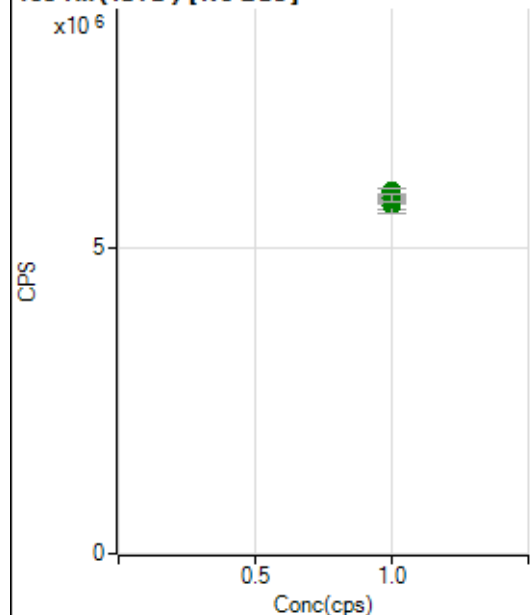
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		149351.01		P	4.8
2	☐	1.000		152419.35		P	1.9
3	☐	1.000		155251.11		P	1.2
4	☐	1.000		154361.29		P	1.2
5	☐	1.000		149864.25		P	0.4
6	☐	1.000		153174.37		P	0.9
7	☐	1.000		154265.42		P	0.8
8	☐	1.000		158593.73		P	0.5

89 Y (ISTD) [No Gas]

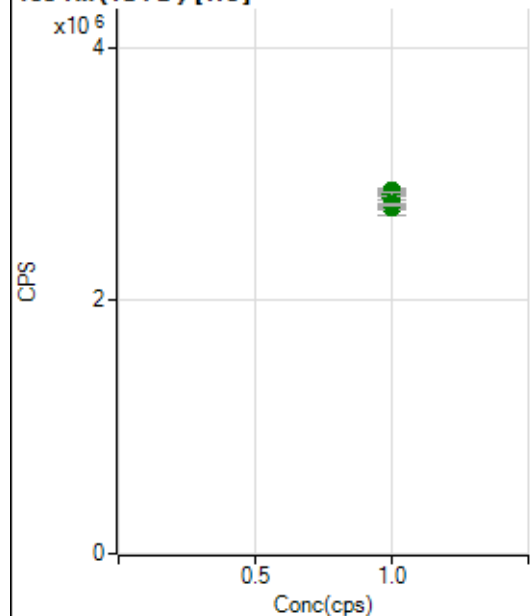
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14304479.78		A	1.0
2	☐	1.000		14976828.25		A	2.1
3	☐	1.000		15268154.22		A	6.0
4	☐	1.000		15099117.27		A	1.0
5	☐	1.000		15007935.05		A	0.9
6	☐	1.000		15403474.91		A	0.9
7	☐	1.000		15749728.51		A	1.5
8	☐	1.000		15945513.79		A	1.7

89 Y (ISTD) [He]

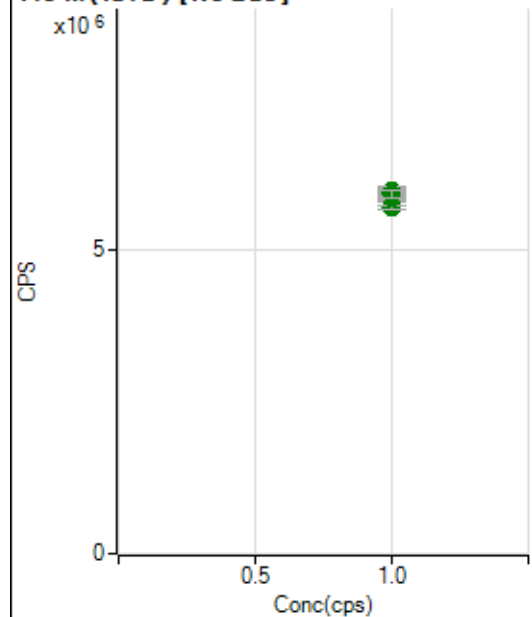
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1637736.38		A	4.9
2	☐	1.000		1640707.14		A	2.3
3	☐	1.000		1697184.91		A	0.9
4	☐	1.000		1675317.47		A	0.3
5	☐	1.000		1659888.46		A	0.6
6	☐	1.000		1685940.38		A	1.9
7	☐	1.000		1672816.99		A	0.6
8	☐	1.000		1758079.51		A	2.1

103 Rh (ISTD) [No Gas]

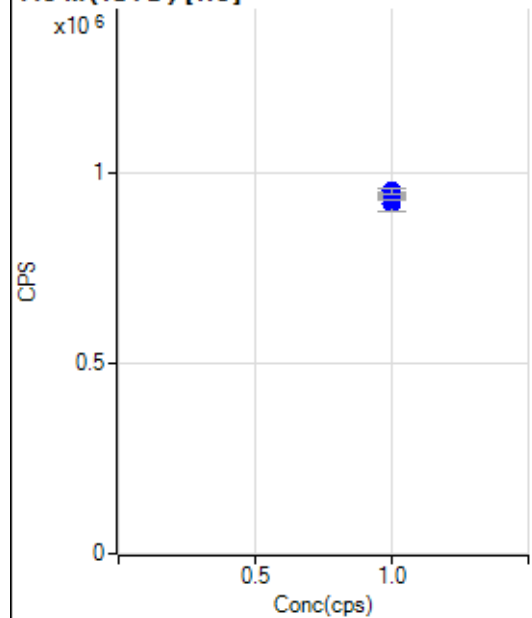
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5688307.51		A	1.8
2	☐	1.000		5681786.37		A	3.7
3	☐	1.000		5843267.67		A	1.3
4	☐	1.000		5923899.92		A	2.2
5	☐	1.000		5795919.92		A	1.4
6	☐	1.000		5934757.08		A	1.9
7	☐	1.000		5834418.88		A	1.3
8	☐	1.000		5814747.18		A	2.4

103 Rh (ISTD) [He]

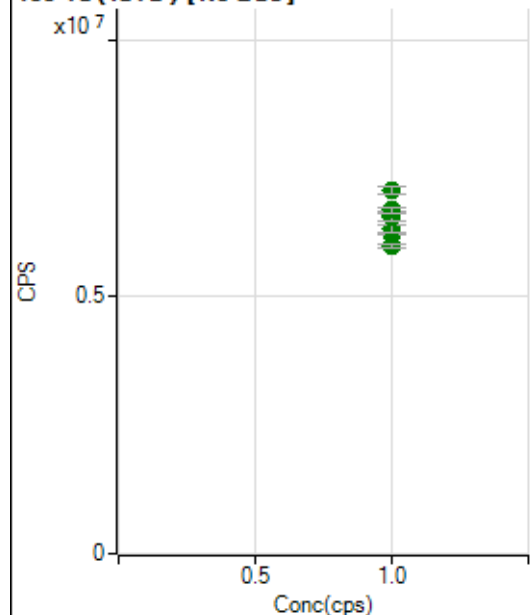
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2753821.37		A	5.4
2	☐	1.000		2812274.82		A	1.1
3	☐	1.000		2822858.26		A	1.4
4	☐	1.000		2868820.58		A	1.1
5	☐	1.000		2733932.32		A	0.7
6	☐	1.000		2864474.06		A	0.8
7	☐	1.000		2844468.36		A	1.4
8	☐	1.000		2760729.06		A	0.8

115 In (ISTD) [No Gas]

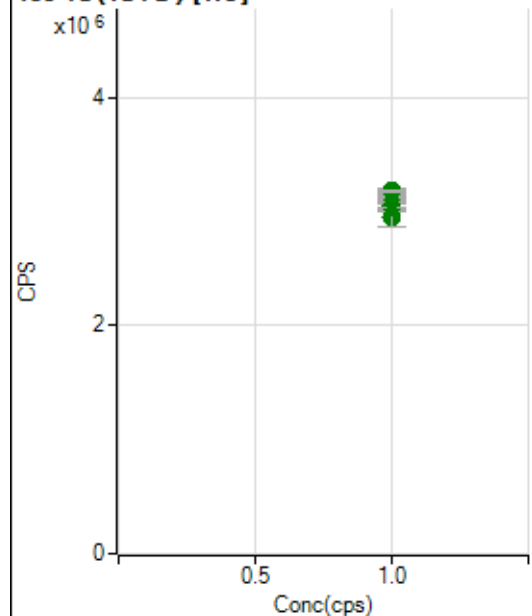
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5697491.46		A	0.9
2	☐	1.000		5852561.04		A	2.2
3	☐	1.000		5933398.43		A	1.4
4	☐	1.000		5864205.39		A	0.7
5	☐	1.000		5854941.92		A	0.5
6	☐	1.000		5975699.13		A	1.1
7	☐	1.000		5957617.70		A	2.8
8	☐	1.000		5929372.94		A	2.0

115 In (ISTD) [He]

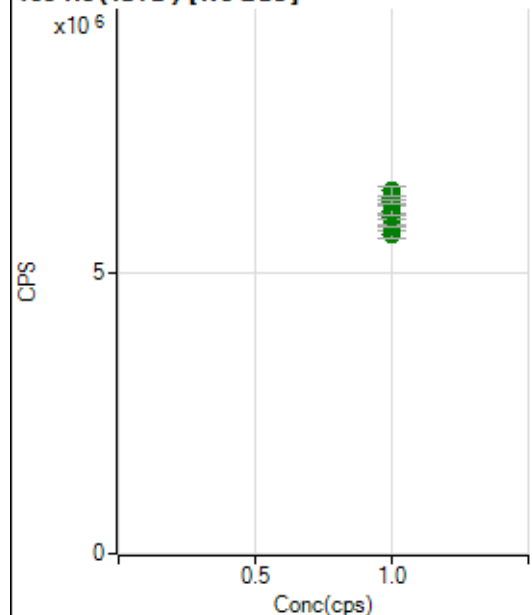
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		923257.35		P	4.8
2	☐	1.000		943187.19		P	0.8
3	☐	1.000		954583.41		P	0.9
4	☐	1.000		947670.36		P	0.5
5	☐	1.000		933137.85		P	0.5
6	☐	1.000		944153.03		P	1.4
7	☐	1.000		932068.80		P	0.2
8	☐	1.000		954010.65		P	1.3

159 Tb (ISTD) [No Gas]

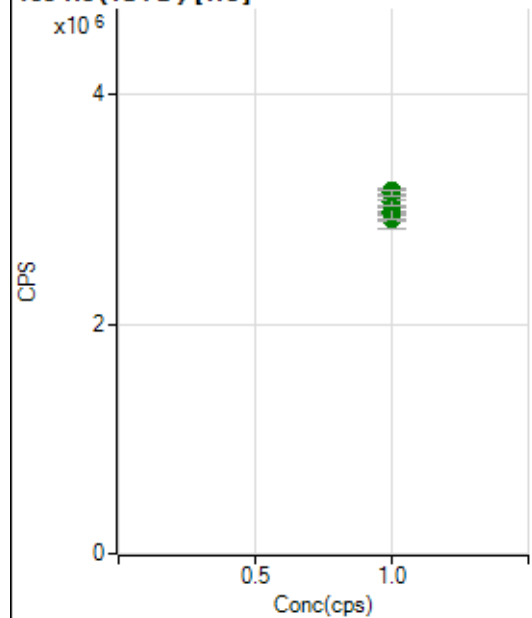
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5979597.96		A	0.9
2	☐	1.000		6219780.60		A	0.4
3	☐	1.000		6307819.77		A	2.6
4	☐	1.000		6322912.06		A	2.2
5	☐	1.000		6540465.46		A	2.5
6	☐	1.000		6569561.85		A	2.5
7	☐	1.000		6684286.01		A	1.5
8	☐	1.000		7057548.92		A	2.2

159 Tb (ISTD) [He]

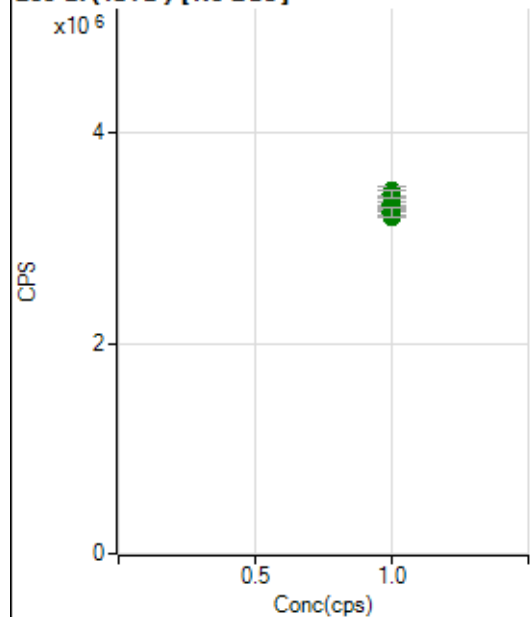
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2940804.58		A	4.9
2	☐	1.000		3032211.66		A	1.8
3	☐	1.000		3053909.19		A	2.2
4	☐	1.000		3058075.99		A	1.4
5	☐	1.000		3093369.75		A	0.4
6	☐	1.000		3132633.43		A	1.1
7	☐	1.000		3162390.79		A	2.0
8	☐	1.000		3178996.97		A	0.6

165 Ho (ISTD) [No Gas]

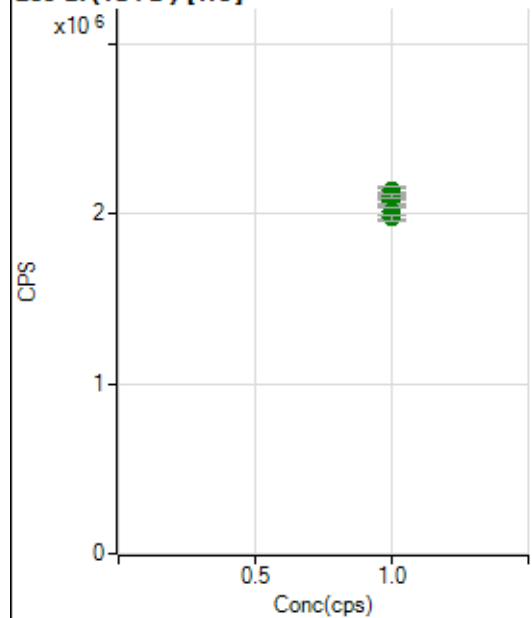
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5684360.15		A	2.3
2	☐	1.000		5964715.19		A	3.6
3	☐	1.000		5833482.12		A	0.9
4	☐	1.000		5999968.41		A	1.0
5	☐	1.000		6110026.70		A	2.7
6	☐	1.000		6329823.75		A	1.4
7	☐	1.000		6259046.15		A	0.8
8	☐	1.000		6461352.27		A	2.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2908742.70		A	5.2
2	☐	1.000		2908767.32		A	0.4
3	☐	1.000		2988287.56		A	1.8
4	☐	1.000		2969465.06		A	1.0
5	☐	1.000		2974126.03		A	4.3
6	☐	1.000		3062309.47		A	1.5
7	☐	1.000		3160830.89		A	1.4
8	☐	1.000		3145203.91		A	1.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3197706.76		A	0.6
2	☐	1.000		3224834.64		A	1.9
3	☐	1.000		3275220.68		A	1.8
4	☐	1.000		3305293.35		A	1.8
5	☐	1.000		3321547.97		A	3.0
6	☐	1.000		3446190.47		A	2.8
7	☐	1.000		3416339.25		A	2.0
8	☐	1.000		3245864.68		A	2.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2017051.91		A	5.0
2	☐	1.000		2076216.17		A	2.6
3	☐	1.000		2116288.04		A	3.2
4	☐	1.000		2137819.03		A	2.1
5	☐	1.000		2082202.07		A	4.2
6	☐	1.000		2098168.27		A	3.2
7	☐	1.000		2109343.65		A	1.0
8	☐	1.000		1978483.13		A	2.0

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8030822-MS.b
Acq. Date-Time 2022-03-08 12:53:09
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		5282	52820.64			3.018	5.000
24		56211	562111.11			2.940	5.000
25		7508	75076.08			2.632	5.000
26		8793	87925.54			2.755	5.000
59		15063	150628.64			2.937	5.000
113		6069	60692.70			3.526	5.000
115		20271	202712.93			3.428	5.000
206		6558	65581.27			3.167	5.000
207		5486	54862.82			3.091	5.000
208		13498	134977.59			3.527	5.000
220		1	10.60			21.461	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

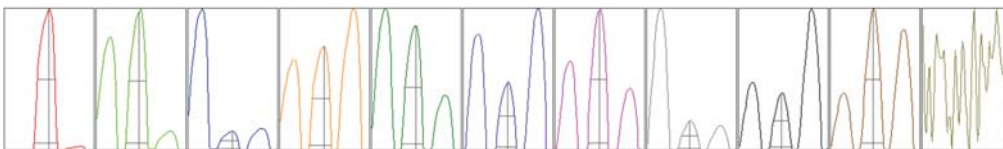
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	5366	5159	5283	5499	5102
24	56037	55531	56580	58710	54198
25	7457	7366	7619	7791	7305
26	8871	8467	8873	9102	8650
59	15085	14624	15282	15673	14650
113	6134	5838	6084	6384	5907
115	20737	19766	20276	21143	19435
206	6475	6329	6629	6877	6480
207	5464	5276	5571	5722	5399
208	13488	12870	13745	14126	13260

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	1	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	9619.30	9.00	8.90 - 9.10	
24	102379.96	23.95	23.90 - 24.10	
25	13840.87	25.00	24.90 - 25.10	
26	15726.31	26.00	25.90 - 26.10	
59	28864.64	59.00	58.90 - 59.10	
113	12389.60	113.00	112.90 - 113.10	
115	40989.99	115.00	114.90 - 115.10	
206	13233.94	205.95	205.90 - 206.10	
207	11184.00	206.95	206.90 - 207.10	
208	27698.00	207.95	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.775	0.900	
24	0.58	0.737	0.900	
25	0.58	0.754	0.900	
26	0.60	0.739	0.900	
59	0.55	0.732	0.900	
113	0.52	0.686	0.900	
115	0.51	0.686	0.900	
206	0.52	0.740	0.900	
207	0.51	0.744	0.900	
208	0.51	0.763	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode ---

Nebulizer Gas 0.73 L/min

Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.2 V	Deflect	15.6 V
Extract 2	-180.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

Discriminator	3.9 mV	Analog HV	2288 V	Pulse HV	1640 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		3431	34309.35			0.730	
89		11048	110477.62			0.949	
205		20237	202374.02			1.721	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	3452	3449	3403	3446	3404
89	11181	11128	10981	11022	10927
205	20653	20541	20098	19820	20075

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.75 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.2 V	Deflect	4.6 V
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US EPA Tune Check Report

Extract 2	-180.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

Discriminator	3.9 mV	Analog HV	2288 V	Pulse HV	1640 V
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